

EXPEDITION
TO DISCOVER THE SOURCES OF
THE WHITE NILE,
IN THE YEARS
1840, 1841.

BY FERDINAND WERNE.

From the German,
BY CHARLES WILLIAM O'REILLY.

IN TWO VOLUMES.
VOL. II.

LONDON:
RICHARD BENTLEY, NEW BURLINGTON STREET
Publisher in Ordinary to Her Majesty.

1849.

CONTENTS

OF

THE SECOND VOLUME.

CHAPTER I.

	PAGE
SLEEPING TOKULS OR BARNS. — CRUELTY AND LICENTIOUSNESS OF THE TURKS. — ARNAUD AND SELIM CAPITAN'S FEAR OF THE NATIVES. — NEGROES SHOT BY THE TURKS. — CONDUCT OF THE NATIVES. — RED MEN. — ARNAUD'S MADNESS. — FEAR OF THE NEGROES AT FIRE-ARMS. — VISIT OF A CHIEF AND HIS SON. — TOBACCO AND SHEEP. — MOUNT KORÈK. — NATION OF BARI. — VISIT OF THE BROTHER AND SON-IN-LAW OF THE KING. — CHAIN OF MOUNTAINS.	1

CHAPTER II.

RECEPTION OF ENVOYS FROM KING LÀKONO. — DESCRIPTION OF THEM. — RELIGION OF THE BARIS: THEIR ARMS AND ORNAMENTS. — PANIC CREATED AMONG THE NATIVES AT THE EXPLOSION OF CANNON. — LIVELY SCENE ON SHORE. — COLOURED WOMEN. — ARRIVAL OF KING LÀKONO AND SUITE. — HIS INTERVIEW WITH THE COM- MANDERS: HIS DRESS. — THE NATIONAL MUSICAL INSTRUMENTS OF BARI. — PRESENTS TO KING LÀKONO, AND HIS DEPARTURE	26
---	----

CHAPTER III.

MIMOSAS AND TAMARIND-TREES. — DIFFERENT SPECIES. — DURRA AND CREEPING BEANS. — RELIGION OF THE ETHIOPIANS. — SECOND VISIT OF LÀKONO. — THE CROWN-PRINCE TSHOBÉ. — PARTICULARS	
---	--

	PAGE
OF THE COUNTRIES OF BARI AND BERRI.—DESCRIPTION OF LÂKONO'S FAVOURITE SULTANA. — MOUNTAINS IN THE VICINITY OF BARI : THEIR FORM AND DISTANCE.—ISLAND OF TSHÂNKER.—REMARKS ON LÂKONO'S LEGISLATION AND CONDUCT.—THE NJAM-NJAM, OR CAN- NIBALS.—CUSTOMS AND ARMS OF THE NATIVES.—THE TROPICAL RAINS.	50

CHAPTER IV.

KING LÂKONO'S PRIDE. — BEER KNOWN TO THE ANCIENT EGYPT- IANS.—BAR OF ROCKS. — WAR-DANCE OF THE NATIVES.—DETERMI- NATION OF THE TURKS TO RETURN, AND DISAPPOINTMENT OF THE AUTHOR.—COMMENCEMENT OF THE RETURN VOYAGE.—REPUBLICANS IN THE KINGDOM OF BARI.—VISIT OF THE FRENCHMEN TO MOUNT KORÈK.—REASON OF THE AUTHOR'S AVERSION TO ARNAUD. — CON- DUCT OF VAISSIÈRE, AND SCENE IN HIS DIVAN. — CULTIVATION OF COTTON AT BARI.—APATHY OF FEÏZULLA-CAPITAN AND THE CREW. —SUPERIORITY OF MAN TO WOMAN IN A NATIVE STATE.—WATCH- HOUSES.	76
--	----

CHAPTER V.

RIVER BUFFALOES. — COMICAL APPEARANCE OF THE NATIVES.— WILLOWS.—SPECIES OF STRAND-SNIPES.—MODESTY OF THE WOMEN, AND THEIR APRONS.—THE LIËNNS. — ORNAMENTS OF THIS TRIBE : THEIR TOKULS.—THE SERIBA OR ENCLOSURE TO THE HUTS.—ENOR- MOUS ELEPHANT'S TOOTH. — LUXURIANCE OF THE SOIL. — THE COUNTRY OF BAMBER.—DESCRIPTION OF THE NATIVES.—MANNER OF CATCHING ELEPHANTS.—ROYAL CRANES.—SPLENDID BARTER.—TRIBE OF THE BUKOS.—STOICISM OF AN OLD NATIVE.—SLAVES.—HIPPO- POTAMI AND CROCODILES. — THE TSHIËRRS. — THE ELLIÂBS AND BÔHRS. — DESCRIPTION OF THE FORMER TRIBE : THEIR WAR- DANCE.	102
---	-----

CHAPTER VI.

EXAMINATION OF AN ARM OF THE NILE. — FORESTS ON THE BANKS.—PRICE OFFERED IN ENGLAND FOR A LIVE HIPPOPOTA- MUS. — THESE ANIMALS RARELY MET WITH IN EGYPT. — THE LIËNNS.—ROPES MADE FROM THE LEAVES OF THE DOME-PALM. — VÈKA. — CHARACTER AND DESCRIPTION OF THE LIËNNS. — THE
--

	PAGE
EMEDDI-TREE.—DÖBKER-TREE.—COTTON-TREES.—THE TSHIÈRRS.	
—TRIBES OF THE BODSHOS AND KARBORAHs.—LABYRINTHS OF THE WHITE STREAM.—BARTER WITH THE KARBORÀHS: THEIR DRESS, ARMS, ORNAMENTS, ETC.—MOUNT NERKANJIN.—ISLAND OF TUI.—THE KOKIS.—CONTEST WITH HIPPOPOTAMI.—CROCODILES' EGGS.—HOSTILITY OF THE TSHIÈRRS TO THE ELLIÀBS.—EBONY CLUBS.—THE BÒHRS: THEIR SONGS, ORNAMENTS, ETC.—ANT-HILLS.—“IRG-EL-MOJE” OR WATER-ROOT, A SPECIES OF VEGETABLE.—VETCHES.—THE ANDURÀB OR ENDERÀB-TREE.—THE DAKUIN-TREE.—A SOLDIER STABBED BY A NATIVE.—ANTIQUITY OF DUNG-FIRES.	133

CHAPTER VII.

THE BÒHR “JOI”: HIS TREATMENT ON BOARD THE VESSEL: HIS ESCAPE.—WOMEN'S VILLAGE.—FELT CAPS.—SONGS OF THE BÒHRS.—TUBERS SIMILAR TO POTATOES.—THE BUNDURIÀLS.—THE TUTUIS AND KÈKS.—AN ELEPHANT ATTACKED AND KILLED.—TASTE OF THE FLESH OF THIS ANIMAL.—CHEATING OF THE NATIVES IN BARTER.—WINTER TOKULS OR WOMEN'S HUTS.—MANNER OF MAKING A BURMA OR COOKING-VESSEL.—“BAUDA” AGAIN.—FEÏZULLA-CAPITAN'S INDUSTRY IN SEWING.—THE KÈKS LIVE BY FISHING.—DESCRIPTION OF THE WOMEN.—SERIOUS ACCIDENT TO THE VESSEL.—OSTRICHES AND APES.—FOGS ON THE WHITE STREAM.—WATCH-TOWERS.—SALE SHOOT A GIGANTIC CRANE: IS PUNISHED.—THE NUÈHRS.	169
---	-----

CHAPTER VIII.

NUÈHRS.—ORNAMENTS.—MANNERS OF THE WOMEN.—THE MEN.—CURIOUS CUSTOM OF DRESSING THE HAIR, AND STAINING THEMSELVES.—VISIT OF A CHIEF.—SPEARS USED INSTEAD OF KNIVES.—SINGULAR WAY OF MAKING ATONEMENT, ETC.—WE HEAR ACCOUNTS OF OUR BLACK DESERTERS.—BOWS AND QUIVERS SIMILAR TO THOSE REPRESENTED IN THE HIEROGLYPHICS.—THE TURKS INDULGENT IN ONE RESPECT.—MOUNT TICKEM OR MORRE.—TRACES OF ANIMAL-WORSHIP AMONG THE NUÈHRS.—ARNAUD'S CIRCUMNAVIGATION OF A LAKE (AND GASCONADES).—ADVICE TO FUTURE TRAVELLERS ON THE WHITE NILE.—SWALLOWS.—MEANS OF DEFENCE AGAINST GNATS DISCOVERED.—THE SHILLUKS AGAIN.—QUESTION OF THE CONTINUAL ALTERATIONS IN THE APPEARANCE OF THE NILE.—GUINEA-FOWLS.—GIRAFFES.—BLACK WASPS.—TURTLE-DOVES.—OUR AUTHOR CAUGHT	
--	--

	PAGE
IN A THORN-BUSH.—FABLED LUXURIANCE OF THE PLANTS IN THE TROPICAL REGIONS.—VIEW FROM A HILL.—MANNER OF CATCHING FISH AMONG THE NATIVES.—THE SOBÀT RIVER.—THE INUNDATIONS OF THE NILE CONSIDERED	203

CHAPTER IX.

ROYAL CRANES.—SCRUPLES OF FEÏZULLA-CAPITAN.—COMPOSITION OF THE SHORES.—DESCRIPTION OF THE DHELLÈB-PALM AND ITS FRUIT.—FORM OF EGYPTIAN PILLARS DERIVED FROM THIS TREE.— DIFFERENCE BETWEEN EGYPTIAN AND GREEK ARCHITECTURE.—DE- SCRIPTION OF THE SUNT-TREE.—DEATH OF AN ARABIAN SOLDIER.— VISIT OF A MEK OR CHIEF.—DANGEROUS RENCONTRE WITH A LION ON SHORE.—PURSUIT OF THIS BEAST BY THE AUTHOR AND SULI- MAN KASHEF WITH HIS MEN.—FEAR OF THE NATIVES AT THE TURKS.—PLUNDER OF THEIR TOKULS BY THE CREW.—BREAD-CORN OF THE DINKAS.—ANTELOPE HUNT.—DIFFERENT SPECIES OF THESE ANIMALS.—IMMENSE HERDS ON THE BANKS OF THE WHITE NILE. —LIONS AGAIN.—BAD CONDITION OF THE VESSELS	237
---	-----

CHAPTER X.

VARIOUS SPECIES OF GRASSES.—FORMATION OF THE SHORES.— WATER-FOWLS.—AN ANTELOPE OF THE TETE SPECIES, NOW AT BER- LIN.—STRATA OF THE SHORE.—THE SOBÀT RIVER: THE MAIN ROAD FOR THE NATIVES FROM THE HIGHLANDS TO THE PLAINS.— OBSERVATIONS ON THE COURSE OF THE NILE AND SOBÀT.—A THOU- SAND ANTELOPES SEEN MOVING TOGETHER! —WILD BUFFALOES, LIONS, AND HYENAS.—AFRICA, THE CRADLE OF THE NEGRO RACE. —THE SHUDDER-EL-FAS: DESCRIPTION OF THIS SHRUB.—ARNAUD'S CHARLATANRY.—OUR AUTHOR FEARED BY THE FRENCHMEN.— ARNAUD AND SABATIER'S JOURNALS: THE MARVELLOUS STORIES OF THE FORMER.—THIBAUT'S JEALOUSY.—VISIT OF A SHIEKH OF THE SHILLUKS.—FEAR OF THE TURKS AT THESE PEOPLE.—SULIMAN KASHEF PURSUED BY A LION	257
--	-----

CHAPTER XI.

THE SHILLUKS, A VITIATED PEOPLE.—CAUSE OF THE VIOLENT RAINS IN INNER AFRICA.—REFUSAL OF THE SULTAN OF THE SHIL- LUKS TO VISIT THE VESSELS.—DESCRIPTION OF A SPECIES OF	
--	--

	PAGE
GRASS.—BARTER WITH THE SHILLUKS.—CONQUEST OF THEIR COUNTRY NOT DIFFICULT.—FORM OF THEIR BOATS.—AMBAK RAFTS.—IRON RARELY FOUND AMONG THE EGYPTIAN ANTIQUITIES.—WORSHIP OF TREES BY THE SHILLUKS: THEIR RELIGIOUS RITES.—STARS IN THE SOUTHERN REGIONS OF AFRICA.—SHILLUK WOMEN: THEIR DRESS.—REFUSAL OF THE MEN TO SELL THEIR ARMS.—THE BAGHÀRAS: THEIR DRESS, ETC.—RE-APPEARANCE OF THE ISLAND-PARKS, AND MOUNT DEFAPAÜNGH.—ASCENT OF THIS MOUNTAIN, AND FULL DESCRIPTION OF IT.—THE DINKAS: THEIR LOVE FOR OLD CUSTOMS.—DESERTION OF TWO DINKA SOLDIERS, AND REFUSAL OF THEIR COUNTRYMEN TO GIVE THEM UP.—SHEIKHS SEIZED, AND DESERTERS RECOVERED.	280

CHAPTER XII.

LANDING IN THE TERRITORY OF THE BAGHÀRAS: DESCRIPTION OF THEM: THEIR HOSTILITY TO THE DINKAS, AND MARAUDING EXCURSIONS INTO THE COUNTRY OF THIS TRIBE.—CURIOUS POSITION IN WHICH THE LATTER TRIBE STAND.—MOUNT N'JEMATI: EXAMINATION OF IT.—A SHRUB-ACACIA.—APPEARANCE OF ELEPHANTS AND LIONS.—GEOLOGICAL DESCRIPTION OF THE MOUNTAINS.—MONKEYS APPEAR AGAIN.—MOHAMMED ALI UNDER THE FORM OF AN HIPPOPOTAMUS.—ISLAND OF ABU.—THE HASSARIES.—A HIPPOPOTAMUS KILLED BY SULIMAN KASHEF.—SHORES OF THE NILE COMPARED TO THOSE OF THE MISSISSIPPI.—EL AES.—THE KABEABISH ARABS.—HEDJASI.—THE MOUNTAIN GROUP OF ARASKOLL.—CONDUCT OF SULIMAN KASHEF TO A SHIEKH AND ARABS.—BEST WAY TO TREAT THE TURKS.—THE DOWNS: THEIR NATURE.—INTELLIGENCE OF THE DEATH OF SOLIMAN EFFENDI AND VAISSIÈRE.—APPROACH TO KHARTÙM.—ARRIVAL, AND MEETING OF OUR AUTHOR WITH HIS BROTHER.—CONCLUSION.	309
--	-----

EXPEDITION

TO DISCOVER THE SOURCES

OF THE

WHITE NILE.

CHAPTER I.

SLEEPING TOKULS OR BARNs. — CRUELTY AND LICENTIOUSNESS OF THE TURKS. — ARNAUD AND SELIM CAPTAN'S FEAR OF THE NATIVES. — NEGROES SHOT BY THE TURKS. — CONDUCT OF THE NATIVES. — RED MEN. — ARNAUD'S MADNESS. — FEAR OF THE NEGROES AT FIRE-ARMS. — VISIT OF A CHIEF AND HIS SON. — TOBACCO AND SHEEP. — MOUNT KOREK. — NATION OF BARI. — VISIT OF THE BROTHER AND SON-IN-LAW OF THE KING. — CHAIN OF MOUNTAINS.

20TH JANUARY.—The vessels were towed further to the southward by the Libàhn, whilst the commanders, and we Franks with them, walked on the magnificent shore. The wind, with which, however, we had previously sailed, although not quicker than the pace we walked at on shore, freshened at ten o'clock, and we repaired again on board the vessels. I had made a real forced march, and was at last compelled to be carried, owing to increasing weak-

ness. Little villages and isolated tokuls stood in the beautiful woody country, which is interspersed with solitary light spaces or corn-fields, where, however, the short fine grass was withered. These tokuls are elevated above the ground on stakes, and serve to protect the fruits, or as sleeping-places for security against noxious animals or the temporary damp of the soil. The natives dance, sing, and jump, slide on their knees, sell or exchange their god (glass beads—Arabic, sug-sug), amongst one another, and squat, but not by sitting upright in the Turkish manner, and smoke their pipes. These pipes have prettily-worked black clay bowls, with a tube of reeds, and a long iron mouthpiece: even the tongs, to apply the charcoal to light them, are not wanting. They are cheated in the most shameful manner by the Turco-Arabian people; robbed of their weapons, and plundered right and left. What am I to do? I am ill, and have lost my voice; yet I try to prevent these outrages as far as I am able.

The so-called elephant-tree prevails here exclusively; and one of the chief amusements this morning was to shoot down its fruit, in which exploit Suliman Kashef distinguished himself as the best shot. The shady trees, the prospect on the river, enlivened by the glittering sails, the blue chain of mountains—it was a sight that did me good, and refreshed my inmost soul. But all this was again clouded by Turks. Is there another word for Turks? No: Turks,—*basta!* A negro, who came from the other side to swim over to us, got into the track of the sailing vessels, and was drowned, although he might have been easily picked up by two ships following us. The

commanders had gone on a-head, and I was behind with the Frenchmen ; I was not able to call, and therefore fired off my gun, in order, by signs, to induce them to save him. Arnaud also, whose vessel was just bearing up, might have easily prevented the death of the unfortunate creature if he had given a hail to his reïs. He even blamed my impatience, saying I was ill ; and added, with the contemptuous tone, in which the Arab pronounces his " Abit," and the Turk his " kiäfr," " Why do the fellows swim about in the water ?" Upon this I could not forbear using hard words.

An Egyptian soldier, who, like some others of the libâhn, had remained behind on shore to ransack the deserted tokuls, ran behind a young naked girl, when I fortunately noticed the circumstance in our walk. I hastened to Suliman Kashef, who was gallant enough to recall, with a voice of command, the libertine from this his wicked purpose.

The Turkish character involuntarily shews itself on such occasions as these ; it goes against his grain to see an inferior enjoying any pleasure. There was no merit, therefore, in Suliman's conduct, even had he warded off from us a Sicilian vespers. Thibaut had had also a similar incident on board his vessel with the reïs, who wanted to be too free with a young girl whom the former, during this voyage, had purchased for a few glass beads,—I believe from the Keks. This incident was also announced in due form by us ; but they laughed, and said, " Badèn " (afterwards), and Arnaud even joined in this opinion.

At a quarter past ten o'clock, the north wind has completely died away, and we tack about towards the

west for a short tract, when it becomes again so fresh, whilst the wind is S.W., that we are able to sail slowly. To all appearance, unfortunately, our vaunted voyage of discovery will soon have an end. Selim-Capitan is frightened to a ludicrous degree; Arnaud cannot conceal his fear; and Suliman Kashef, not being yet restored to health, is utterly indifferent. I cannot refrain from considering an instant return as a disgrace and as treachery both to the world and Mohammed Ali. On the right an island, and the last of those two which we had on our left still continues, and so we are somewhat free from the noise of the people on the shore. Sale and Sate Mohammed are no longer seen on land; they have perhaps become the victims of their passions, although they were only to shoot for me a pair of turtle-doves.

We halt, for a time, on the left shore, where there is a large village, partly scattered in the wood that skirts the river so beautifully. At eleven o'clock we set out again, and our men drive back the cattle from the island close to us, through the water to the right shore, for their unfathomable throats appear at last to be satiated. The clapping of hands, keeping time to the singing, above which the "kih, kih" of the women is heard, accompanies us from both sides. We cannot hear or see anything for the crowd and clatter, especially myself, round whom all the beautiful world floats as in a mist, and a jarring din sings in my ears, so that my writing, inexorably necessary as it is, becomes exceedingly difficult. I dared not close my eyes for fear of becoming completely confused. I wanted to go to Selim Capitan, or rather to his inter-

preter, but was not able to put the requisite questions and to note down the answers. I continue to write mechanically, and cannot square my own journal, when I try to revise the entries of the last few days; for everything flickers before my eyes, and my memory is gone, so that it all appears to me like a dream.

With a light north-east wind, which also assisted us yesterday, we proceed S.S.W. It is noon, and we have two islands, lying close to each other, on our left. A large island ends on our right, and another one begins, by which the course in the middle of the river is, in some degree, confined. Nevertheless, the river always retains a considerable breadth, and a proper depth; and then,—will the poltroons return? The mountain, already several times mentioned, peeps into the window from the west; it shews itself as two mountains lying one close to the other, the western of which rises conically, and has an obtuse peak, and an undulating tail to the west. The latter appears somewhat wooded, yet these masses giving light and shade may be mostly blocks; the conically ascending mountain, on the contrary, has a smooth surface, and may be an extinguished volcano, although one would not expect to find such here. We now find, for the first time, stones in the river, and they are granite and gneiss. They are not yet rounded; the chain of mountains from whence they come cannot, therefore, be very far distant. We proceed S.S.W. An island terminates on the left, and another follows at the distance of some hundred paces.

Four o'clock. S.W. An occurrence has just happened, which might be the death of us all if

anything were to be feared from the revenge of these evidently good-natured people. We were on the right side of the river, and went to the left, where the little sandal was towed not far from us by the Libàhn. Natives had stationed themselves here in large and small groups; they greeted us, held up their hands, pointed to their necks for beads, and sang, danced, and jumped. There was no end of laughing in our vessel; I was attentive to what was going on, and saw that the natives had seized the rope of the sandal, and would not let it be towed further, for they wanted beads. Probably the crew of the sandal had taken weapons or ornaments from them, without giving anything in return, as this frequently happened. We steered close to the left shore to assist our men, when eight bold armed figures advanced towards us, and gave us to understand by pantomimic signs, that we had presented beads to their neighbours below, but would not give them anything. They offered the rings on their arms, and their weapons, and signified to us, as we were advancing libàhn, on account of the faintness of the wind, that they would not allow us to tow any further unless we gave them something. They said all this, however, with a laughing countenance, jumped about, and laughed anew. It was plain they were only in jest; but our bloodthirsty fellows, seeing no danger in this small number of men, and never thinking of the probable consequences, just like the Turks, considered this an excellent opportunity to display their courage. They seized their weapons. I was unwell, but yet was standing on deck, and kept order as well as my weak voice would allow me. I

went from one to the other, and enjoined them not to fire, until arrows were first shot at them. The black soldiers, who were mostly recruits, I admonished especially not to be *filles de joie* (the usual expression here applied to those who exhibit fear in discharging their guns), but men (*rigâl*, sing. *ragel*), to grasp the gun firmly, and to take good aim. Our blacks are generally very much afraid of the report of guns, and do exactly as the Greeks did at the commencement of their war for freedom; they lay the butt-end on the thigh, and fire at random. On the White River, also, the report of these unknown weapons was more feared than the real danger itself. They listened to me; but then came the vessel of Captain Mohammed Agà, a fool-hardy Arnaut, who is always trying to distinguish himself in some way or another. He shouted to the sandal to cut away the rope, although the men were still on land. This was about to be done, when the tallest negro, who had twisted the rope round a little tree, pointed his bow at the sailor who was about to cut it through with his knife. He laughed at the same time, and it was clear that he was not in earnest; for he had wrestled in a friendly manner with the other sailors, when they tried to get the rope from him, without making use of his weapons. Yet the Arnaut commanded them to "fire," whilst he had already aimed at the incautious native, being the first to discharge his piece. In a moment all three vessels fired away, as though they were beset by the devil. I was only able to pull back a couple of fellows whose guns had flashed in the pan. Eleven or twelve other victims followed the first, who was knocked over by the captain's shot.

Those who went away wounded were not counted. An old woman was shot down by an Egyptian standing near me, and yet he boasted of this heroic deed, as did all the others of theirs. There might have been from twenty-five to thirty natives collected together at that place, scarcely thirty paces from us, and the high-standing straw might have concealed several more.

We sailed away with the wind favouring our criminal action, for our men had again come on board before the firing commenced. The Dahabiës sailing ahead of us must have heard our shots; they did not however furl *one* sail to lend us assistance, which might have been eventually necessary. Before we caught up these vessels, we saw a woman on the shore, looking about among the dead men, and then afterwards running to the city at some distance from the shore. The natives were hastening towards it, but they did not trust themselves near us. Yet they knew not the melancholy truth that our shots would hit at a distance; hitherto they feared only the thunder and lightning of them, as we had seen several times. We halted a moment; the unhappy creatures or relatives of the slain came closer to the border of the shore, laid their hands flat together, raised them above their head, slid upon their knees nearer to us, and sprang again high in the air, with their compressed hands stretched aloft, as if to invoke the pity of heaven, and to implore mercy of us. A slim young man was so conspicuous by his passionate grief, that it cut to my heart, and—our barbarians laughed with all their might. This unbounded attachment to one another, and the circumstance that that woman, in spite of the

danger so close at hand, sought for the man of her heart among those who had perished, affected me exceedingly, because such moral intrinsic worth, flowing from pure natural hearts, is unfortunately more acquired than innate in civilised nations. We had only advanced a little on our way, and above thirty unarmed natives, who must yet at all events have been informed of the tragical incident that had just occurred, sat down on the sand directly close to the river, without suspicion, or designing any harm to us, as if nothing had taken place, and really—I had enough to do to prevent their being shot at.

We reached the vessels of the commanders, and Mohammed Agà was the first to hasten to them, in order to report the incident. But I also drew near, and there was a kind of court martial summoned. Arnaud did honour to the European name, and took the part of the Turks, who looked upon the whole as a trifle. Finally, the Arnaut, who had already confessed the fact, faced about boldly and swift as lightning, declaring that he had never fired a shot, and that he would bring witnesses to prove it, and—here the matter ended. Selim Capitan thought he shewed his wish to keep up a good understanding with the natives, by throwing into the grass on the shore some miserable bits of glass paste, with a cup. The natives looked and groped about, whilst we sailed to the neighbouring island. Here we found two divisions of negroes, whose chiefs were also presented with strings of beads. Again we threw beads among the grass, and ordered the whole occurrence to be explained by the interpreters; more beads, and—every one jumped forward delighted. One of these chiefs

had all his naked body streaked over with ochre : he looked like the black huntsman of Bohemia. They are said to do this in particular when they marry ; we have seen already several such red men ; even the hair and the ivory bracelets which are thick and of a hand's breadth, as well as the numerous iron rings on the wrists and ankles, are coloured red in this fashion. Rage and vexation, together with the heat of the sun, compelled me to be carried back quite exhausted down the shore to the vessel.

Thibaut and Sabatier disclosed to me, as usual, their vexation at Arnaud's assuming conduct, and how they are cut up and calumniated in his journal, which they secretly read, without being able to call him to account for it at the moment. So likewise I am obliged to listen to the loud lamentations of his servant Mustaphà, a Maltese renegade, who always ends with " Credo che sia mezzo matto quest gran signore o baron fututto." Although he looks very fierce, yet he cannot renounce his nature as a tailor, and is continually asking me whether we are in any danger and begs me, for the holy Madonna's sake, to take care that we return as speedily as possible, for he would rather a thousand times live with his devil of a wife, than venture again so far among the heathens. Arnaud is jealous at Suliman Kashef having purchased a young girl with his beads, and by the assistance of Duschoil, the interpreter, prettier than his little sailor's trull, whom he has hung with glass beads from head to foot. In a fit of madness he writes a long French letter to the Kashef, summoning him to restore the girl immediately, although we are already a long way from her people. Thibaut translates the letter, and

looks as if he had fallen from the clouds, for he is in the very same boat with Arnaud himself, respecting the purchase of a girl, that he is going to make a living present to his black Sara, whom he brought back from England to Khartûm. After the letter was read aloud, a rude burst of laughter naturally ensued, and Suliman Kashef said when it was finished, in a pitying tone of voice, "El shems, el shems!" (the sun, the sun.) Certainly it is not the first time that the African sun has produced such an effect on Arnaud; he suffers like all of us, and his arrogance and pride shake him more violently, because they find opposition on every side.

21st January. I this morning felt myself uncommonly well but had scarcely stepped out of the door to go ashore, when the stream of light—I know not what other name to give it—rushed upon me with such force, and penetrated, as it were, through me, that I was scarcely able to sink back on my bed; and it is only now, when, however, the sun is at its height, that I feel myself at all capable of writing. We have remained since early this morning, in a southerly direction. The sails have been twice hoisted, but on the average we are towed by the rope. We leave an island on our right. There are several red skins among the negroes, who are really handsome men; the tokuls, standing singly, are large, well roofed, and, resting upon strong stakes, open on all sides. The stakes form a peristyle, and the inner wall is smeared inside with clay; perhaps they serve as stables for cattle, and summer tokuls. A small gohr, or river, in the neighbourhood of which we repose at noon, comes merrily in from the right shore,

and the stream has a noble breadth, but little depth of water.

Two o'clock, S.W. We have a slight north wind, and an island on our right; behind it, the forest continues on the shore. The high mountainous district beyond it is still blue, for the day is not clear. It appears, indeed, partly covered with wood, and to form a chain with the other mountains. The information we possess about this region is still very scanty, and it would be difficult to make any thing out of the interpreters, even if my head were less affected. Groups of a hundred and fifty to two hundred negroes are standing together on all sides; they generally accompany us a short way, without uniting themselves to the next swarm. This perhaps arises more from accident than for the purpose of keeping their boundary stations on the water, to prevent falling together by the ears, whilst watering their herds, and on other occasions. Islands impede our course, and the crew see, to their terror, a number of natives, holding their weapons aloft, wade through the river from one side to the other. We immediately take possession of a little islet in the middle of the river, and surround it with our vessels; a regular military position, for it is surrounded with deeper water. It is about a hundred paces long from north to south, and from five to six broad, and the shores fall away steeply to the river.

Feizulla Capitan disembarks, and returns soon from Selim Capitan, with the melancholy intelligence that there is "moje mafish," (no water). I was completely in despair, left the vessel, and set off to the top of the islet, where Turks and Franks were

assembled for further consultation. The black people found on it were driven away by us; they jumped into the water like frogs, so that we heard a simultaneous fearful splash. They soon stood on the more shallow ground, and shouted their huzza, "Hui, ii hui iih!" laughed and joked, and offered their valuables, &c. We let some of the negroes come on the islet, and gave them presents of beads. About evening a large herd of cows appeared on the right shore; they were lean, possibly having been long in want of fresh grass. The men, armed with spears, bows, and arrows, drove the herds from the right to the left shore, where we likewise remarked a herd of cattle. Our gentlemen were horribly afraid when the people accumulated like a black swarm of bees on all sides.

It was a lucky circumstance that a large bird of prey perched on the mast, to take a view aloft of the flesh under him. All eyes were directed to us and this bird, when Suliman Kashef seized his long gun; the blacks watched us closely, jostled each other, and were on tenter-hooks of anxiety, for they did not know what it meant. Suliman Kashef fired; the report set them in momentary fear, and they were about to run away, when the sight of the bird falling into the water, noted them, as it were, to the ground. When, however, other birds of prey flew down on the water, to see what fate had befallen their feathered friend, the "Hui, ii hui iih," immediately came to a close; they ran as fast as they could, for this appeared too much for them to stand, having seen no arrow or stone flying at the bird. This single shot might be of importance at this moment, when the people generally, though at a

distance, might have shewn a bad feeling ; moreover the incident was of inestimable value to the expedition, because it infused the feeling of our superiority, and even enhanced it, in their dismayed hearts. If I had previously strained every nerve to prevent the return already determined upon, and had got the again-convalescent Kashef on my side, so now even the timorous Selim Capitan was inclined to have the track more accurately examined.

22nd January.—There was not a breath of wind, and it is still undetermined whether we shall proceed further. I therefore proposed to the Frenchmen, whose courage I could naturally have no doubt of, to take out some of the freight from their vessel, which is lightly built and convenient, and thus to press on further. They agreed to this proposal. I described the country, and we were having breakfast together, when intelligence was brought to us that it was decided to go on. No sooner does Selim Capitan see the long-legged blacks going to their cattle, swimming over to the right shore, than fear seizes him anew ; we, however, by our joint efforts, manage to remove it.

In the meanwhile, the chief of this country comes to us with his grown-up son. A red cloth dress of honour is put on the old man ; a red chequered cotton handkerchief tied round his head ; and glass beads are hung round his neck. They also gave the son beads, and bound a piece of calico round him like a napkin. It was plain to be seen that they were delighted with these presents, and particularly at the pleasure of conversing and communicating with us. The old man's name is *Nalewadtschòhn*, his son's

Alumbèh ; but their great *Mattà* (king or lord, perhaps analogous to the title of honour previously conferred on us, "*Màdam*,)" is called *Làkono*. The latter is said to possess a beautiful red woollen dress, of a different cut to the *Abbaie*, presented to *Nalewadtsdhòhn*. It must be truly interesting to see here, all of a sudden, a negro king in an English uniform, although it may only come from the Ethiopian sea, or the Indian Ocean. Sultan *Làkono* dwells on Mount *Pelenja*, and rules over a large country, called *Bari*, pronounced by the Turks, however, without further ceremony, *Beri*. We are said to have been within the limits of this kingdom for the last two days: those men shot by us belonged also to *Bari*.

According to *Nalewadtsdhòhn*, who is in general very talkative, and does not appear very favourably inclined towards his king, all the mountains in the neighbourhood have abundance of iron ; and Mount *Pelenja*, a quantity of copper, which is here in great estimation. Iron-ochre, which the natives here and there use to colour themselves with, is said to be found on all sides, formed by them, however, into balls : by this preparation, perhaps, a cleansing of the material takes place. The high mountain-chain we had already seen, lies to the west, at some hours' distance, over the left shore of the Nile. Its name is *Niakanja*, and the mountains before us are called *Korèk* and *Lubèhk*, which are said to be followed by many other higher mountains. Both the men are strikingly handsome, although not one of the whole multitude can be called ugly. They are tall and strongly built ; have a nose, somewhat broad indeed, but not flat ; on the contrary, slightly raised, such as

we see in the heads of Rhamses ; a full mouth, not at all like that of negroes, but exactly the same as in the Egyptian statues ; a broad arched forehead, and a speaking, honest-looking eye. The latter is not, as we have found generally in the marsh regions, entirely suffused with blood, whereby the countenances have a dismal appearance, but clear, full, and black, yet not dazzling. We observed that their legs were well formed, though not muscular ; their naked bodies were adorned with the very same decorations of ivory and iron as we had seen in the others. The name of the village on the right side of the river is Baràko ; the village lying immediately opposite, under the trees, before which are a small island and pastures, is called Niowàh. Alumbèh was sent as our envoy to King Làkono.

We leave our island at noon, and have a larger island on our right, a smaller one on the left, and tow to the south, accompanied by the negroes in the water : they even come with their long bodies to the side of the vessel, and part with every thing they have for the beloved sug-sug.

At Asser (three o'clock in the afternoon), S.S.W., with oars and sails. A village, on the right side of the river, contains only a few tokuls ; but a large herd of cattle, grazing there, sets our crew longing again. About sun-set, S. I procure a beautiful spear for a single glass bead—silly, childish people ! Immediately after sun-set, W.S.W. On the left a small island ; a gohr, or arm of a river, appearing to form a large island, pours forth from thence, if it be not a tributary stream. The wood before us contrasts by its dark hue with the coloured horizon, over which,

as yet, no alpine country glows. On the right shore stand a number of armed and laughing negroes, in picturesque positions; this has been the case the whole time, both in the water and on land. They walk arm-in-arm, quite in a brotherly manner, or with their arms round one another's necks, as the students in Germany used to do in my time. They help each other in getting up on shore, and have frequently one foot placed firmly against the knee, standing like cranes. They lean on their spears, or long bows, or squat down; but I see none of them sitting or lying on the ground, according to the lazy custom of the orientals.

The north wind is so faint that we are obliged to lend assistance with poles; the river has more water, thank God, than we thought; and even our reis, whom a longing fit for his wives every now and then seizes, believes that this water-course will hold on for some time. We anchor in the middle of the river, and the guards are doubled in the vessels. I am tired of this constant variety of sensations, and yet would like to see and hear much more. My head is so heavy and stupid, that I cannot accept Suliman Kashef's invitation.

23rd January.—Half-past eight o'clock. We have gone so far in a southerly direction by the rope, and we move S. by W. and S.W. The rapidity of the river has increased from one mile and a half to two miles. The walk on shore has tired me more, because I was followed by the natives, with all their effects, and retarded, so that I was obliged to break a road through them, half by violence, though I am still very weak in my legs. I purchased for a couple

of miserable beads a little sheep, covered partly with wool, and partly with hair, as the sheep here generally are, and having a long mane under the throat, and horns twisted back. Selim Capitan says that a similar species is found in Crete.

Tobacco is called here also tabac, as mostly on the White River. The Arabs give it the name of dogàhn; this is the small-leaved sort, with dun-coloured flowers, which is cultivated likewise in Bellet Sudàn. I have not seen the tobacco-plant growing wild here; therefore, I cannot say whether the name of tobacco is indigenous here with the plant, or has been introduced by immigrants. Nevertheless, the Arabs are not generally smokers, and it is unlikely that tobacco was brought in by them; and it is less probable, because, had it been so, it would have kept the name of dogàhn. In Sennaar, however, a good but very strong tobacco has been cultivated for ages, and was probably introduced by the Funghs, who are likewise a well-formed negro race. Our usual title of honour is matta, which they, however, only give to the whites. The shores are very extensively intersected with layers of sand.

Ten o'clock. S. by E., and then S.W. Two villages on the right shore. We sail with a slight north wind, but scarcely make one mile, for the current is considerably against us. We meet continually with some fire-eaters among the blacks on the shore; they are startled, certainly, at the report, but are not particularly frightened, especially if it be not close to their ears. We have Mount Korèk in a south-westerly direction before us. It stands like the Niakanja, to which we have only come within the

distance of from three to four hours, and which lies behind us, isolated from the other mountains. The summit appears flat from where we are ; it has many indentations, and seems to rise only about six hundred feet above its broad basis, to which the ground ascends from the river. The wind having nearly ceased for half an hour, freshens again for three miles.

At noon. S.S.W. In a quarter of an hour, a gohr or arm of the Nile comes from S. by E. ; we make only two miles more, and the wind deserts us again ; we lie, therefore, as if stuck to the place, after having been thrown by the current on to the island, formed by the before-named arm on the right shore. But the wind soon freshens again ; we sail away cheerfully. The ships drive one against the other, or upon the sand, but work themselves loose again ; the negroes come in the water ; confusion here—confusion everywhere. A herd of calves stop in the water before us ; this is really tempting, but we sail on. The log gives four miles, from which two miles must be deducted for the rapidity of the current, though the reïs can not understand this.

At half-past twelve o'clock, the end of the island ; we sail S.S.E., and then S. by W. On the right shore a large durra-field, apparently the second crop on the very same stalks. The natives there, according to the custom of this country, have little stools to sit on, and a small gourd drinking-cup by their side. As before, part of them are unarmed, and have merely a long stick, with forks or horns at the top, in their hands. The covering of the head is various. Several have differently formed little wicker baskets

on their heads, as a protection against the sun. They wear strings of the teeth of dogs or apes on various parts of the body, but mostly on the neck, as an ornament or talisman. They have bracelets, the points of which being covered with bits of fur, are curved outwards like little horns. Our envoy Alumbèh imitated all the motions and the voice of an ox, in order to make us understand the meaning of these bracelets. These, as well as the forks on their houses and sticks, appear to denote in some way a kind of symbolic veneration for the bull, whose horns I had previously seen adorned with animals' tails; for the bull is bold, and the support of the family among the herds.

One o'clock. A number of negroes are squatting on the island at the left, or rather are sitting on their stools, and wondering at us sailing so merrily to S.S.W. I count eleven villages; but I do not trust myself on deck, for we have 30° Reaumur. About evening the whole scene will appear more surprising and pleasing to me; for even my servants, looking in exultingly at the window, praise the beauty of the country. On all sides, therefore, plenty of mountains, stones, and rocks; the great buildings in the interior of Africa are no longer a fable to me! If the nation of Bari has had internal strength enough to pursue the road of cultivation for thousands of years, what has prevented it not only from rising from its natural state, but also from appropriating to itself the higher European cultivation? It has a stream, navigable, and bringing fertility, full of eatable animals; a magnificent land affording it everything: it has to sustain war with the gigantic monsters of the

land and water, and to combat with its own kind ; it possesses the best of all metals, iron, from which it understands how to form very handsome weapons sought for far and near ; it knows how to cultivate its fields ; and I saw several times how the young tobacco plants were moistened with water, and protected from the sun by a roof of shrubs. The men of nature it contains are tall, and enjoying all bodily advantages ; yet—it has only arrived at this grade of cultivation. If the perfectibility of nature be so confined, this truly susceptible people only requires an external intellectual impetus to regenerate the mythic fame of the Ethiopians.

The hygrometer seems to have got out of order through Arnaud's clumsy handling, for it yesterday morning shewed 82°, notwithstanding the air is far drier and clearer than this height of the hygrometer would shew. Half-past ten o'clock. We are driven on the sand, and there we stop to wait for the other vessels. Alas ! the beautiful wind ! Two o'clock. We sail on southwards. On the right two islands. Selim Capitan is said to have the Sultan's brother on board his vessel ; we are making every exertion, therefore, to overtake him. The commander no sooner remarks this than he halts at the nearest island. I repaired immediately to his vessel, and found two relations of King Lākono on board. Half-past two o'clock. We leave the island and the previous direction of S. S. W., and approach the right shore of the river E. S. E. On the right a gohr, or arm of the Nile, appears to come from S. W., and indeed from Mount Korèk, or Korèg, as the word is also pronounced.

The two distinguished guests sit upon their stools, which they brought with them, with their own royal hands, in naked innocence, and smoke their pipes quite delighted. An arm of the river leaves on the left hand the main stream to the north, and may be connected with a gohr previously seen. A village stands above the arm of the river on the right shore of our stream, and an island is immediately under it before the gohr itself. The name of the village is Ullibari, and the arm Beregènn. It is said to flow down a very great distance before it again joins the White Stream. The latter winds here to the south; to the right we perceive a village on the left shore, called Igàh. On the right shore we remark several villages, and those summer huts, or rekùbas, already mentioned. All the tokuls have higher-pointed roofs, of a tent-like form. The country generally, in the neighbourhood of the residence of the great Negro-King, appears very populous. The north wind is favourable. The black princes look at the sails, and seem to understand the thing, although the whole must appear colossal to them in comparison with their surtuks, as we perceive from their mutually drawing each other's attention to them. The king's brother, whose name is Nikelò, has a friendly-looking countenance; and his handsome Roman-like head, with the tolerably long curled hair, is encircled with a strip of fur instead of the laurel. On the right he wears a yellow copper, on the left a red copper bracelet. The latter might have been easily taken for an alloy of gold, although the noble man did not know the gold which was shewn him as being of higher value, but distinguished that it was a different metal. Silver he did not know at all. These

mountains being rich in metals, must afford very interesting results with respect to the precious metals. The other guest is called Tombé: he is the son-in-law of the king; stronger and taller than Nikelò, and always cheerful.

We landed soon afterwards on the right shore, as the nearest landing-place to the capital, Belènja, on the mountain of the same name, which was at some distance. They gave us the names of all the mountains lying around in the horizon. The river flows here from S.S.W., or rather the right shore has this direction. To N. by W. Mount Nerkonji, previously mentioned as Niakanja, long seen by us; to W. by S., Mount Konnobih; behind it, in the far distance, the mountain-chain of Kugelù; to S.W., the rocky mountain, Korek; behind which the before-named mountain-chain still extends, and is lost in misty heights. These do not appear, indeed, to be of much greater height; but on a more accurate observation, I distinguished a thin veil, apparently sunk upon them, clearer than the western horizon, and the blue of the mountain forms vanishing from Kugelù to the south. As I once looked for the alpine world from Montpellier, and found it, trusting to my good eye-sight, so now I gazed for a long time on this region of heights; their peaks were clearly hung round with a girdle of clouds, apparently shining with a glimmering light in opposition to the clouds hanging before them in our neighbourhood. When I view the long undulating chain of Kugelù, distant at all events, taking into consideration the clear atmosphere, more than twenty hours behind Konnobih (some twelve hours off), the highest summit of which, west by south,

without losing its horizontal ridge, disappears first evidently in the west, and is completely veiled behind Korèk lying nearer over south-west, I conceive that this Kugelù well deserves the name of a chain of mountains, even if we only take the enormous angle of the parallax at twenty hours' distance.

These mountains lie, to all external appearance, upon the left side of the river, and Nikelò also confirms this. On the right side of the Nile, we see the low double rocks of Lùluli to S.S.E., and a little further to S.E. by S., the two low mountains or hills of Liènajihn and Konnofih lying together. To S.E. Mount Korrejih, and then lastly to E. the mountain chain of Belenjà, rising up in several peaks to a tolerable height, but apparently scarcely elevated more than 1000 feet above the Nile. Far towards S., over the Lobèk, I remarked from here several other misty mountains, the names of which I would have willingly learned, for I feared, and with justice, that they would be invisible in advancing nearer under the prominences of these African Alps. The royal gentlemen, however, with whom we stood on an old river bed of six feet high, were restless, and in a great hurry to take home their presents of a red coat and glass beads. The city is like all other villages, but large: the king's palace consists of several straw tokuls lying together, encompassed as usual with a seriba; this also Nalewadtshòn had told us. The Ethiopian palaces, therefore, have not much to boast of; it is sufficient if the men in them be pleased and happy, and not oppressed by the cares of government and want of sustenance. The durra was also here, as I had remarked in other places, either cut away, or

cropped before it became ripe by the cattle ; no matter, —it sprouted a second time, and promised a good harvest, though only as yet about seven feet high. I had seen it thrice as high in Taka, without the people thinking even of cutting it down or mowing it. Selim Capitan dares not trust the natives ; we went, therefore, ashore at the island close at hand, fixed stakes in the ground, and tied the vessels fast to them.

CHAPTER II.

RECEPTION OF ENVOYS FROM KING LÂKONO.—DESCRIPTION OF THEM.—RELIGION OF THE BARIS: THEIR ARMS AND ORNAMENTS.—PANIC CREATED AMONG THE NATIVES AT THE EXPLOSION OF CANNON.—LIVELY SCENE ON SHORE.—COLOURED WOMEN.—ARRIVAL OF KING LÂKONO AND SUITE.—HIS INTERVIEW WITH THE COMMANDERS: HIS DRESS.—THE NATIONAL MUSICAL INSTRUMENTS OF BARI.—PRESENTS TO KING LÂKONO AND HIS DEPARTURE.

24TH JANUARY.—I repaired to Selim Capitan, to be present at the reception of the Sultan Lâkono. He had sent two other envoys to announce to us that he would come, and we were to wait a little. One of these ambassadors was likewise a younger brother of the king's, a real giant both in height and breadth, and coloured red from head to foot; there was not even a single hair on the whole body of this Hercules that was not red. His name is Dogalè. Nikelè, already known to us, returned also, but entirely in his natural state, not having even one of the strings of beads presented to him round his neck. The other envoy, a relation of the king's, is called Betjà. Dogalè lolls very comfortably on the carpet extended before the cabin, supporting his long ribs on the little stool placed under him. Favoured by nature in every respect, he has regular features, and a good-tempered though not intelligent countenance. All the questions asked of these high and mighty lords were answered

with the greatest readiness. Sultan, or king, is called in their language Matta, which means generally a lord, but there is no other *lord* besides him. There is no one in these countries equal to their Matta in power and strength. The word Lākono was also pronounced Lāgono, for they frequently change *k* for *g*, as well as *p* for *b*, *vice versá*, and they vary the fall of the accent, for example, Belènja and Pelenjà. Lākono has forty wives and several children, amongst them many grown-up sons. They shew us the number, not by stretching out the fingers of both hands, but by holding their clenched fist towards the questioners, in order to express by that means the number five or ten. Each of the brothers of the king had six wives, and this appears to be their usual appanage; for the women are purchased, and they are probably allowed a certain number of wives, according to their station. A private man, such as the sheikhs or chiefs of the community, has only three; the others have only one or two wives, exclusive of the slaves taken in war or purchased, like the male ones, for iron weapons. The latter, I learned on my return to the country of the Bocos, down to which place Lākono has navigated, for the purpose of purchasing slaves, as they told us there.

We order the drum to be beat and the men to pipe; it was with difficulty then that they could keep their seats. They do not display any troublesome prying spirit, or impertinent curiosity; but they see *too much* at once, the impression assails them too powerfully on all sides. I gaze on these people,—they are men like ourselves, but they are more bashful than we, — not, however, by any means ap-

proaching that timidity and helplessness which we have perceived, for example, among the Keks. They eat dates, almonds, and raisins, but do not snatch them hastily or greedily. They take the tinned-copper can (Brik) filled with water from the wash-hand basin (Tisht), and drink directly from the curved spout, after having lifted up the cover and ascertained the contents; yet they have never seen such fruits and such a water-vessel. I observe them in their mutual confidential conversation, perhaps referring to us,—what do they think of us? They are not astonished at the white faces; perhaps they take them to be coloured, like their own bodies, for our crew display all possible tints of flesh.

I am led to this latter supposition from a couple of women having previously tried the skin on my face with their wet fingers, to see if it were painted. The features and form of the head are quite regular among these gigantic people, and are a striking contrast to those of our black soldiers, with their more negro-like physiognomy, although *they* are not, on the whole, ugly. I compare the true Caucasian races, who are present, with ~~these~~ men, and find that the latter have a broader forehead. The inhabitants of the kingdom of Bari might be designated a protoplasma of the black race; for not only do they shoot up to a height of from six and a half to seven Parisian feet,* which we have seen also in the other nations, but their gigantic mass of limbs are in the noblest proportions. The form of the face is oval, the forehead arched, the nose straight, or curved, with rather wide nostrils,—the alæ, however, not projecting disagreeably; the mouth

* A Parisian or French foot is equal to 1.066 English (Transl.)

full, like that of the ancient Egyptians; the orifice of the ears large, and the temples a little depressed. The last we do not find in the Baràbras, and the races akin to them in Abyssinia. The men of Bari have, besides, well-proportioned legs, and muscular arms. It is a pity that they also extract the four lower incisors, for not only is the face disfigured by this custom when they are laughing, but their pronunciation also becomes indistinct. They differ, moreover, from the nations hitherto seen by having no holes in their ears for ornaments; and they do *not* tattoo themselves. Yet I remarked some who had incisions, as imaginary ornaments, on their shoulders: such exceptions may originate from the mothers being of another race. I have even seen in the land of Sudàn instances of a twofold genealogical table in the countenance, because the father and mother were of different nations. There appears to be no national custom with respect to wearing the hair long or short; but generally the hair is short, and not more woolly than that of the Baràbras and Arabs. On some there was none to be seen, and it appears either to be removed by a knife or a cauterising process, such as the women in the harim use for other parts. Some wear their hair like a cock's comb from the forehead down to the nape of the neck; others have scarcely the crown of the head covered: the most, however, wear tolerably long hair, in the natural manner, which gives a significant look to many faces. Their good-natured countenances correspond also to their jokes among themselves, which are, perhaps, occasionally directed against us. I have never been able to discover in the whole journey their reverence for our

race and the god-like descent, much as this was asserted by Thibaut, who was with the first expedition.

It does not appear,—at least, we could not make out from them,—that they recognise one God as the essence of all that is good and beautiful, who punishes and rewards; but neither do they worship idols, for *that*, I believe, I have fully ascertained. They treat one another with frank brotherly love, stand embracing each other, divide the fruits given to them, assist in embarking and disembarking from the vessels to the shore; and all this in an affectionate manner. But yet they must have their peculiar ideas of friends and enemies, of injuries and revenge, and be drawn to commit acts, which we can scarcely imagine, when we see such an apparently harmless people of nature.

Skill in arms, which is generally not to be despised, is an accomplishment most desirable of all to a man living in a state of nature. The first things he seeks are weapons against the wild beasts; the fist, therefore, which Nature has given for seizing and striking, is used for this purpose. The first weapon is the club: even the poorest person here carries this instrument of defence. Then man learns to know the different arms of animals,—the eye, tooth, and the horn; therefore, we see here some of the clubs pointed at one end, in order to cut into the enemy's ribs in case of necessity, directly the blow from it is parried by the shield or casque. The stone, used by monkeys, and especially by the large cynocephali, for defence, as I was convinced, perforce, in the country of the Troglodytes, among the rocks of Kàffela el Lns, and which the modern Greeks are especially expert in throwing, does not appear to be used here as an in-

strument of warfare. *Iron* spears and darts did not come till later, although they may have had them long previously of wood, such as we see even now. The most useful working implements, the knife, hatchet, &c., are next introduced; and from these also other weapons originate; the spear, not being fixed firmly on the shaft, became used as a two-edged knife, and the battle-axe might have followed the hatchet.

To speak of religious principles among these people would be out of place. Family love, the mutual living together, and the same customs and habits may form the basis of their moral principles, and be the *first axiom of mutual forbearance*. The first external sight which might produce, if not astonishment, at least a feeling of attachment and love, even to veneration, must be what makes a deep impression on the soul: for example, the sun and moon; or what gives sustenance, as the corn, for instance; or protection and comfort, as the shady tree, &c. The moon is, probably, in higher esteem here than the burning sun, although the latter was certainly very agreeable to the natives when they collected themselves before daybreak on the shore, and stood each by his little fire, kindled on account of the cold, and fed by the reed-stalks growing between their extended legs. I could not ascertain that there was such a veneration for these two heavenly bodies, nevertheless I believe as much from their expressions and narrations. Although these were only repeated to us in a fragmentary manner, and their explanation assisted by gestures, yet they shew that valour, like the *virtus* of the Romans, is the essence of all virtues, to which all

others, springing from their pure uncorrupted nature, are subordinate.

The man wears the skin of the wild beasts he has slain, not as a covering, but as an ornament and triumphant spoil. If it were not so hot here, he would, like the ancient Germans, wear their scalp on his head as a war-cap. He carries the daring weapon of the wild boar killed by him—the tusk—upon a bracelet or frontlet. I saw also some wearing on the arm, as an ornament, an imitation of a boar's tusk, made of ivory; and, as already mentioned, they have iron bulls' horns on their bracelets. As the heads of these two animals so often appear as emblems in German escutcheons, so here also they are less considered as the memorials of dangers overcome than as signs of reverence or esteem of this *valiant* beast. If the rings with horns were more general, I should believe that, as the men on the White Stream display an uncommon love and affection for their cattle, they carried these horns, like the ancients did the phallus, as the attribute of fertility, unless the custom here had not the narrower signification of an Ethiopian Apis, or Father of Cattle.

In the meanwhile about fifteen hundred negroes may have been collected on the shore, not including those scattered on every side. They are armed without exception, and indeed with all their weapons,—a sight sending a thrill of horror through the veins of the Frenchmen and Turks, which is shewn plainly enough in various ways. They have only the consolation, and this ought to have prevented them before from feeling any fear at a danger not really existing—that we have, in truth, the grandees of the kingdom on board

our vessels, and that they continue to be in the best humour, and certainly have no evil design, for Nature's stamp imprinted on the human countenance cannot be deceptive here. Even Suliman Kashef has become quiet, and is perhaps turning over in his mind how he shall act in case of a sudden attack.

All the natives have set up their "hui ih!" several times, and at every time we stretch out our necks towards the neighbouring shore to see what is going on. This "hui ih" always resounds *à tempo*, as if at word of command; there must be therefore an analogous signal, though our ears cannot distinguish it over the water. It is a cry of joy intended for their Matta. We are still waiting for him, but in vain; and in the meantime we din the ears of our guests with drumming and fifeing. They are also plied continually with sweets. Again and again they enjoy them, and do not prefer the sugar to the fruit, but eat slowly one after the other, as if they had been accustomed to them from youth upwards, and laugh and jest with us. We hear from them that the kingdom of Bari extends for four days' journey down the river; that the latter is called, in their language, Tubirih, and has its origin at a long distance off, but they know not whether from the mountains or the valley. There are said to be several other nations on its shores,—a sign, perhaps, of the considerable distance of its sources. These tribes have also a different language, but *there is no matta so powerful as Làkono*; which saying, since we have been in the kingdom of Bari, they are never tired of repeating. The red Goliath lolls and stretches himself in the most comfortable manner, and the others also change their position from time to

time, and do not remain, like pagodas or the Egyptian statues of kings, in the lazy repose called by the Turks *kew*. Dogalè is pleased at being measured; he is six feet six inches, Parisian measure, in height, with an unusual development in breadth, powerful shoulders, and a chest that might be used as an anvil. The two others, however, are not so large, although far overtopping us. The large brass bells, brought by us as presents for the cattle, pleased them very much, and they give us plainly to understand that they can hear the sound of such a bell at a distance.

We tell them that we want wood for our vessels; they shout to the people, but the latter appear to pay very little attention, or do not like to go away from our vessels, keeping a sharp look out on them, either from the interest of novelty, or in case of any future danger to their men; and perhaps, in this respect, they are not armed in vain. When our guests were repeatedly requested to procure wood, they tell us to fire among the people, even if we should kill a couple of men. They laugh whilst saying this, and it really appears that they do not believe in the possibility of shooting a man dead, and only wish to frighten their people by the report. They would have us, however, fire; and Selim Capitan therefore ordered his long gun to be handed him, and fired in the air close to them; they were dreadfully startled by the report, but immediately afterwards laughed, and wanted us to repeat it. This was done. I should have liked to have made a rough sketch of the group, but I was far too unwell, and very thankful even that I was able to sit, and write down on the spot what I heard and saw. A

fine field was open here for a painter or sculptor ; these colossal well-proportioned figures—no fat, all muscle—so that it was delightful to look at them, with the exception of the calves of their legs, which were formed like lumps of flesh. No beard is developed either in young or old, and yet it does not appear that they use a cosmetic to extirpate it. If Selim Capitan pleased them better with his smooth shaven chin, than the long-bearded Suliman Kashef, yet they exhibited a kind of horror when he shewed them his hairy breast, which perhaps appeared to them more fit for a beast than a man.

Therefore the supposition that they extract the four lower incisors not to be similar to beasts, has at least some apparent foundation, although the under jaw does not project, and, consequently, the lips are not made smaller by this extraction. Man here is always indeed elevated far above the beast, and needs, therefore, no such mutilation of the teeth. Our Dinkas, who themselves want the four lower incisors, have no other reason to allege for it, than that they do it to avoid the similarity to a beast, especially to the ass (Homàr), as is the general answer in Sennaar, to questions on this subject. The Turks take it for a kind of circumcision, just as we might suppose it meant a baptismal rite, being the sign of an act of incorporation by that means in a vast Ethiopian nation, divided now into several tribes. As this extraction of the teeth first takes place in boyhood, it might be considered to denote the commencement of manhood, and capability of bearing arms ; but I have never heard of the ceremonies which would necessarily, if that were the fact, take

place on the occasion. There is also another objection to this supposition, viz.,—that a similar operation is performed on the girls. With respect to the eyes, they are full and well formed, like those of all the negroes of the White River, but with a dirty yellow white, which, in the inhabitants of the marshes, is generally suffused with blood in a shocking manner.

At last then it was determined to fire off a cannon, to see what impression this thunder would make upon them. They sat upright upon their stools—off went the gun, and the princes nearly kissed the planks on the opposite side, as if they had been felled by a blow. They sat up, however, immediately again, laughing loudly all the time, and wanted us to fire again: their request was complied with, but they crouched down low again to the side, were uncommonly pleased, and requested one more repetition of this report. Not a negro, however, was to be seen on all the shore; and it was feared, with justice, that the Sultan, who could not be far off, might be struck by a panic and return: the firing was therefore discontinued.

Intelligence arrives that King Làkono will be with us about three o'clock in the afternoon; whereupon the blacks, being suitably clothed by us, and hung round with strings of beads, took their leave with the red Dogalè, all except Lombè, who is one of the king's subjects, and a sheikh in a neighbouring district down the river. The latter is a very sensible, quiet man, with a more intellectual physiognomy than the others; the Turks give themselves all possible trouble to obtain information from him about the gold. He says that Mount Pelenja itself does

not contain copper ; that Làkono, however, has a good deal of copper in his house, brought from other mountains at a distance ; that Làkono's dress also came from this country, which is called Berri. Moreover, he took the gold bar shewn to him for a different species of copper ; and, as he does not know how to distinguish gold, the latter may be found blended with copper in the royal treasury, and the mountains of Berri may be auriferous. The population is clearly very large, but he could not give us the number. He named several districts, part of which bore the names of the neighbouring mountains ; and it almost seems to me as if there had been earlier independent tribes, who were first subdued by the great Làkono. He does not appear either to be a good royalist, and was evidently glad when the king's sons had withdrawn ; he then put on a familiar look, which their presence had hindered him from doing previously. There seems to be no doubt that this country is a central point of negro cultivation, although Berri and other succeeding countries, may be superior to the kingdom of Bari. I am curious about the Sultan's dress. As Berri is said to lie to the east, perhaps it was not made there, but has come, by means of barter, from India. Lombè also went away richly decorated (for the Turks cannot contain themselves now at the idea of gold El Dahab), in order, probably, to meet the Sultan, or, perhaps, to get out of his sight with the treasures he had acquired.

I returned to my house, or rather my ship, to take my usual nap at noon ; but the right shore being close at hand, separated only from our island by a narrow

canal, obliges me almost immediately to rise again. The multifarious and manifold adorned and unadorned people afford a pleasing sight as I look at them from my windows. I view, as if from a box at the opera, the stage of black life on the whole length of the shore. Two women appear among the others; their *anteriora* and *posteriora* covered with two semi-circular leathern aprons, tanned red, according to the usual custom here. One is coloured red from head to foot; the other has only her still youthful firm breasts and her head of that hue. She looks, therefore, as if she wore a black narrow jacket under the breasts, and breeches of the same colour under the red apron. She may have been surprised in her toilette by the news of our arrival, and have run off to the shore just as she was; the whole lower part of the body from the breasts downwards was tattooed in the manner customary on the White River.

Buying and bartering are going on; cheating and robbing—the latter, however, only on our side. My servants are on the shore, and making gestures and signs with their fingers, to know what they shall purchase for me of the national wares. I do not bargain in person, for I am afraid of the sun. The people, in spite of their good humour, are, as I have convinced myself here, surprisingly mistrustful. Goods and the price of their purchase, are exchanging hands simultaneously. As the people transact but little business among themselves, it is very natural and right that they should exercise precaution in their transactions with a foreign people like ourselves; and it is certain that we have given the first cause for suspicion.

As I said before, the hair is generally kept short; they decorate it, for want of something better, with a cock's or guinea-fowl's feather. A more elaborate coiffure is of black ostrich-feathers, placed together in a globular form, and the lower ends plaited, in a little basket, the thickness of a fist. This tress-work, holding the feathers, stands on the centre of the head, fastened by two strings round the neck, and appears pretty generally worn. Prince Dogalè also wore one, but of somewhat larger size. Some have their hair, which is tolerably long, smeared so thick with ochre, that merely little tufts are to be seen hanging about. Moreover, leather caps, fitting exactly to the skull, were worn with long or short tassels, hardly to be distinguished from the coloured hair. This antique kind of covering for the head, from which the Greeks and Romans formed their helmets, is similar, as regards form, to the modern fesi or tarbush and takië (the cotton under-cap worn under the Turkish knitting-worsted cap). They appear here to serve principally as a protection against the sun. It was only with difficulty that I could procure two different specimens, and the sellers pointed quite dolefully to the hot sun, when they bared their shaven heads.

Leathern strings, as also strings consisting of aglets, strung in a row, not made, as I thought at first, of conchylia, but of the shells of ostrich-eggs, were slung round their hips. Several of the latter strings, which are also much in request with the women in Belled Sudàn, and require laborious work, were purchased by the crew, and I got, also, specimens, but they were all, with one exception, immediately purloined.

To my great astonishment, I saw subsequently in the Imperial Cabinet of Arts at Berlin, with which my Ethnographical collection is incorporated, a string exactly similar, which Mr. Von Olfers had brought from the Brazils. These strings wander, therefore, from the north of Africa to the west coast of that part of the globe, and from thence with the slaves to America, in the same way as they come from the other side to Sennaar by means of the slaves ; or it may be, that they are made of the same size by the American savages. If the former be the case, this single fact would shew that there is a connection between the country of Bari and the Atlantic Ocean. I was told that the blacks break in pieces the ostrich-eggs, grind the fragments on a stone to a circular form of about two lines in diameter, and then string one lamina after another on a thread, to the length of several ells—a work which requires great patience.

Sometimes from mere stupid wantonness, shots were fired in the air from the vessels, and the natives disappeared from the shore for a short time, but returned directly that the report of the shots died away. Several women now approached, part of them decked with the before-named leathern apron, and part with a *rahàt* girded round their hips, as in the land of Sudàn. The threads hanging down from the girdle are not narrow slips of leather, such as those in Sennaar, but twisted cotton, and only the length of a finger. These scarcely form in front a light thread apron of a span in breadth, and leave the hips free, on which laces with tassels and small iron chains hang down, and a tuft falls down over the os sacrum, moving to and fro when they walk like an animal's tail.

Now I see that the women *wish* to paint themselves, as I saw them before. There are two who have coloured their nipples and navels to the size of a dollar. The breasts are more rounded, and have not that horizontal conical form found in the black slaves of the land of Sudàn. I have already previously remarked that the women on the White Stream possess modesty in the concrete sense of the word; and though part of them are young and beautiful, but not tall, compared with the men, yet they regard these naked and magnificent manly forms without any immodest look; so, likewise, the men, kings of the world, gaze tranquilly upon the women. I am fully persuaded that, where woman bears in her mind the principle of the most necessary covering, naked truth is exactly the thing to keep up constantly a chaste as well as a decent relation between the sexes. Only give these women the deceits of the dress of European ladies, and clothe the men, and we shall see what will become of the *blameless Ethiopians!*

I am the more desirous to see continual repetitions of the sights peculiar to the land of Bari, because, by the festive occasion of the royal visit, these are multiplied in every form, and therefore I am still acquiring much knowledge. The square shields, about three feet long and two feet broad, with scalloped edges projecting into four sharp points, appear to be little used. They are of neat's hide, and have a stick badly fixed in the centre to hold them by, the edge of which is not even turned to give a firmer hold. They have blue and red stripes crossed, each of a hand's breadth, as their external

decoration, and these are coloured with earth, so that they are easily obliterated. The Frenchmen made white stripes with chalk between these colours, and thus was the tricolour found in the middle of Africa. Whether the blue and red streaks serve as signs to distinguish one party from the other in warfare, I know not. *Generally* the men here carried round, high-arched hand-shields, a foot in length, made of very solid thick leather. These hand-shields appear now, and perhaps exclusively, adapted for warding off a blow with the clubs, for they would probably be of little avail as a protection against arrows and spears to such colossal bodies, in spite of all the dexterity of these men. Yet they gave me to understand previously, that they warded off hostile spears by means of these shields.

The boar's tusks on the bracelets were mostly imitations of ivory, and therefore like the small iron bull's horns, are perhaps symbols of valour and the power of nature. They had, besides, all kinds of knick-knackereries on the arm and neck, such as little tortoise-shells, dogs' or monkeys' teeth, entire strings of which even they wear, pieces of bones, &c. It struck me that little bones of this kind are either remembrances or amulets, from the circumstance of their always wishing to retain them when we had already purchased the articles to which they were fastened. The iron necklaces were of very different kinds: close to them were iron ornaments arranged in a row, in the form of a narrow leaf, or in small open spindles, from which little red fruits projected. I observed here also, the wide iron rings for the neck, of the thickness of a finger, which reach over the

head, and down to the middle of the breast. and are not only worn in Khartûm, but also in Egypt, by the daughters of the Fellâhs. We here find an old fellow who will not sell his spear, the shaft of which is roughly wrought from iron, and who laughs at the sug-sug offered to him as idle toys.

I must break off for the moment from this subject, for a fresh clamour resounds, and the cry of "Hui, ih;" therefore away I go to Selim Capitan. We do not sit long with anxious curiosity, and look at the vacant carpet on which the great Matta was to recline, under the shade of the ship's tent (Denda, perhaps derived from the Italian *tenda*, for a war-tent is called Gemma, and a shepherd's-tent of straw-mats Birsh), for the sandal which had fetched the supreme chief from the right shore, arrives. The Melek or Sultan, as the Turks and Arabs call him, on account of his vast power, steps on our vessel, with a retinue of followers, part of whom we knew. The dress and coiffure distinguish his tall figure from all the others. Notwithstanding every one removed on one side, and we form a divàn upon cushions and chests around the carpet before the cabin, yet he treads upon the vessel with an insecure step, for he has his eyes directed towards us, and stumbles against the projecting foot of the gun-carriage. He carried his throne himself,—the little wooden stool, which we should call a foot-stool, and of which all make use; but he bore also an awful sceptre, consisting of a club: its thick knob was studded with large iron nails, to inspire greater respect.

At the Arabic invitation, "fadl ochaut," accompanied by a motion of the hand, he took his seat on

the oval and somewhat hollowed-out stool, of about one foot long, and three quarters of a foot broad. There is something naturally dignified in his countenance and bearing, without any assumption; he looks at the semicircle surrounding him, so that he may not do anything derogatory to his position as Sultan, seeking probably him who is pointed out as the *matta*, or whom he takes to be our *matta*. He then slides along to Selim Capitan, who might appear to him to be of that rank from his corpulence, takes his right hand, and *sucks* his finger-ends, which appears to me a humiliation. The large-bearded Suliman Kashef, vain and proud like all Circassians, wanted to have the same honour paid to him, and held out his fist with its powerful broad knuckles; but King Làkono was autocrat enough to conclude, from the principle of his sovereignty, that two *mattas* or monarchs could not be or exist by the side of one another. Selim Capitan, therefore, was to him the only real and supreme head of the foreigners, and he refused this homage in a very contemptuous manner to Suliman Kashef, who, contrary to his usual custom, was not arrayed in all his bravery to-day. In order not to make himself ridiculous, the latter suppressed the word “*Kiàffar*,” or “*Abd*,” which I saw was already trembling on his lips.

Làkono's brother, and a couple of his suite, as also the Crown Prince Tshobè, whom we had not seen before, clearly endeavoured, without however throwing one glance of disapprobation at the old man, to repair this misunderstanding, occasioned by their peculiar etiquette, by paying all of us great lords the honour of finger-sucking. One thing was that the fingers

could not be bitten off in this operation, owing to their lower teeth being wanting. As a testimony of welcoming and friendship, they stroked also our arms. They had not done this previously, perhaps because the king had not yet assured us of his favour.

That deliberations took place among the household of the king about the possible aim of our journey, may be presumed; both because the Sultan not only kept away for a long time, notwithstanding his residence was only three hours distant, but also from other indistinct intimations, and from the very intelligible previous warning, that we were to remain on the right shore, at the original landing-place, because the Matta would not allow us to move any *further*. Of course we did not take any notice of this warning, and *would* not understand it. Perhaps the white faces of another world, our vessels larger than their palaces, in which we go up the river without oars, when the wind is favourable, and especially the thunder and explosion of our cannons and guns, might have been the principal motive that induced the wise council to come to the reasonable opinion that it would be a ticklish affair to spit us like bats, or to kill us like dogs with clubs.

When we little expected it, the Sultan raised his voice, without commanding *silentium* beforehand with his sceptre, and sang—his eyes directed firmly and shining on us—a song of welcome, with a strong, clear voice. This was soon ended, and the song had brightened him up surprisingly, for he looked quite merrily around, as far as his eyes, which were apparently effected by a cataract, would allow him. This misfortune might be the cause also why he walked, as

if in a mist, with an insecure step on the vessel. According to the translation passed by two interpreters from one to the other into Arabic, he chanted us as being bulls, lions, and defenders of the Penates (Tiràn, Sing Tor, Assad and Aguàn el bennàt).

He is of an imposing figure, with a regular countenance, marked features, and has somewhat of a Roman nose. We noticed on all the bare parts of his body remains of ochre, apparently not agreeing very well with the skin, for here and there on the hands it was cracked. He was the first man whom we had hitherto found clothed.

His temples are slightly depressed ; on his head he wore a high bonnet, in the form of a bear-skin cap, covered over and over with black ostrich-feathers, which were fixed inside by an oval net-work. His feather-tiara was fastened under his chin by two straps ; two other stiff red straps, with small leather tufts, projected like horns over both temples ; these horns denote here, perhaps, the royal dignity, like the caps of horns (Takië betal Gorn) of the Moluks, in Balled-Sudàn, and may be an imitation of Ammon, or of Moyses. He shook his cap very often in real pleasure. A long and wide blue cotton shirt, with long open sleeves, lined inside with white cotton, reached down to the feet from the throat, where it was hollowed out round, and had a red border. A large blue and white chequered cotton band, bound round the hips, held this dress together. He wore round the neck strings of blue glass paste, and rings of thin twisted iron wire. The feet were covered with well-worked red sandals, of thick leather. Bright polished iron rings, the thickness of the little

finger, reached from the ankles to the calf, exactly fitting to the flesh, and increasing in size as they went up the leg. Above these he wore another serrated ring, and a thin chain. The knuckles of the right hand were surrounded with an iron and a red copper ring, of twisted work. On the left hand he had a prettily decorated yellow copper ring, with a dozen narrow iron rings, likewise fitted exactly to the arm. As we subsequently saw, the upper part of both arms was surrounded with two heavy ivory rings, of a hand's breadth. Contrary to the usual custom, he had also the *four lower incisors*; we could not ascertain the cause of this distinction, and at our question on the subject, he only answered with a cunning laugh. I soon remarked, moreover, that he wanted the upper teeth; yet he may have lost them from old age, for want of teeth is common even among these people, and he might have numbered some sixty years.

This want of sound teeth—as negroes are always distinguished for good teeth, and the marshy soil has entirely ceased in the country of Bari—may perhaps only arise from eating some fruit unknown to us, such as the cassavas in Guiana, which have the same effect; or the reason for it may be sought in their pulling them out directly they pain them, with their iron instruments, always at hand. The constant smoking of their very strong tobacco, with the absence of cleanliness, which, however, is not the case with our Nuba negroes, may contribute to this imperfection. At first he smoked the cigar given him, and then the Turkish pipe, with the air of an old smoker; for smoking is a general custom among the nations

on the White Nile. Dates were set before him, and the others picked him out the best, and breaking them in two, laid the stones in a heap, and gave him the fruit in his hand, partaking of them with him.

The music which had accompanied him to the shore, and embarked on board the vessel, consisted of a drum, made out of the trunk of a tree, and beaten with sticks, a kind of clarionet, and a fife, different only from the small ones worn by all the natives round their necks by being three or four times larger. King Lākono's dress and copper rings came from the country of Berri; this was a confirmation of what we had already heard. He had never seen horses, asses, or camels, and it seemed as if there were no words in his language to denote them; nor did he know of an unicorn, and did not understand our explanation of these animals. If the Arabs in the land of Sudàn do not deny the existence of the unicorn in the interior of Africa, and even assert that there are some, if the subject be followed up further, this arises from politeness, in order that they may correspond with our desire to prove the real existence of such an animal and is not what they know to be truth.

Lākono made himself comfortable afterwards, and sat down upon the carpet, moving his little stool under his shoulders. A red upper garment was fetched, and the Turks made him comprehend that he must stand up to have it put on. They bound a white shawl round his ribs, and another was twisted round his head, as a turban, after they had clapped on him a tarbusch. On this, one of the two slaves who accompanied him placed on his own head the royal

feather-cap, and laughed behind his master's back. This only lasted, however, a minute, though the others took no offence at it. The dress altogether, was found to be too short and scanty for such limbs. Several strings of beads were hung round Lākono's neck, and several more piled up before him, to take to his wives ; hereupon he could rest no longer, and went off, followed by all the others.

He was taken back by the sandal to the right shore, where his people shouted to him a " hui ih ! " and afforded him an assisting hand when disembarking from the vessel, as well as on the shore itself, according to the usual practice among themselves. We fired off cannons in honour to him, as soon as he set foot on land. Fear thrilled through them all, and even the Sultan set off running for a moment, till he was disabused of his panic, probably by his brothers.

CHAPTER III.

MIMOSAS AND TAMARIND-TREES.—DIFFERENT SPECIES.—DURRA AND CREEPING BEANS.—RELIGION OF THE ETHIOPIANS.—SECOND VISIT OF LÂKONO.—THE CROWN-PRINCE TSHOBÈ.—PARTICULARS OF THE COUNTRIES OF BARI AND BERRI.—DESCRIPTION OF LÂKONO'S FAVOURITE SULTANA.—MOUNTAINS IN THE VICINITY OF BARI.—THEIR FORM AND DISTANCE.—ISLAND OF TSCHANKER.—REMARKS ON LÂKONO'S LEGISLATION AND CONDUCT.—THE NJAM-NJAM, OR CANNIBALS.—CUSTOMS AND ARMS OF THE NATIVES.—THE TROPICAL RAINS.

25TH JANUARY.—At eleven o'clock we leave our island at the right shore, and halt towards the south, for the north-east wind is favourable to us. On the right and left are several little villages, and on the right shore a low foreland, which we had already visited and found very fertile. Several poison-trees stand near the village lying in the background. The bushàr and garrua have not left us, but cover the greatest part of the shore, where the thorn-bushes appear to diminish, the nearer we approach the equator. We remark the very same circumstance with respect to the mimosas, and in those that we still here and there see, the leaves are broader and seem to announce varieties or different species. Even the tamarind-tree, from which we have already gathered ripe fruit, has a different physiognomy here to what we see in the country of the Shilluks; the branches are more slender, and the larger leaves are not so

thickly piled one upon the other. I was laughed at by my servant when I asked the name of this tree.

We sail along the left shore, and advance three miles and a half; but one ship soon gets obstructed here, another there, and the water-track pointed out to us by the natives is really very narrow. The stream, which might previously have been about three hundred paces, is here certainly five hundred. A large island, with another smaller one, covered with durra, rises out of it. At one o'clock S.S.W., in which direction we sail now at the right shore, where the water is better than we had thought. The negroes continue to run along the shore, or in the shallow places plunge into the water, and cry as loud as they can to us to stop a little and barter with them. The right shore is planted with durra, but it is already harvested. It is a small reddish kind, giving but little meal. At the previous landing-places there were, amongst other plants, several small creeping beans, of white and red colour, thriving luxuriantly on the ground. A small island on our left.

I hear, from the mast, that nineteen mountains (gùbàl) are counted, without reckoning the small ones. The chain of mountains is, properly speaking, not wooded; but that which looks like a forest, from a distance is, in reality, the fragments of rocks, with which they are nearly all studded at the base: yet between these blocks a tree and copsewood here and there thrives, which may sprout out beautifully green in the rainy season. A splendid ground, covered with trees, and inclined towards the river, approaches to the foot of the Korek, but does not probably afford the shade we suppose at a distance. The shores are not only

very strongly intersected with layers of sand, but also the mould of the dam itself is completely mixed with sand. Therefore it seems that the river enters now into a rocky bed, from the mountains of which there is not much fertility to wash away.

Two o'clock; W. by S. On the left shore again, several of those round-headed beautiful trees, with large acacia-leaves, under which the negroes seek for shade. The Frenchmen had, according to yesterday's measuring, $4^{\circ} 40'$ north latitude, and $41^{\circ} 42'$ east longitude, from Paris. Selim-Capitan, however, found $4^{\circ} 35'$ north latitude, and 30° east longitude. At half-past two o'clock we go with the river S.S.W., which direction it seems to retain for the present. On the left an island. The people still continue to shout, but they run no longer, as if they were mad, into the water, to cling to and hold fast to the vessels, for the sailors rap their fingers smartly; but stand quietly on one foot, resting the other against the knee. Three o'clock; S.S.W. The water is not bad, and we shall have, perhaps, a good course for a considerable time, if we only sound properly. On the right there is a small island, with a couple of tokuls behind upon the shore. Immediately on the left is another shallow island, with luxuriant durra. The natives wade through the water to an island situated not far from the left shore, upon which we see a farm-yard. Two more islands follow this one, and they swarm with black people. Four o'clock. The direction of the river is always still S.W., whilst we seek for deeper water in the windings of the stream. Right and left are islands, and also tokuls, part of which peep over the trees. The forms of the mountains be-

come more visible and different from what they had hitherto appeared. This produces uncommon changes in the landscape, where all the surface of the earth is picturesquely skirted with trees.

Who would have thought of such a beautiful country in the centre of Africa, and looked for such a well-proportioned, gigantic race as we see yonder ! They are real giants. Go on shore, look at the Turks, the Christians, and our other companions,—what children they seem standing in the middle of this crowd of Titans. Half-past four o'clock. Rocks shew themselves, for the first time, in the river. Three large, and several small ones form an ominous cross-line for our voyage. At five o'clock we halt at an island near these rocks. Here there are picturesque materials enough, and nothing shall prevent me from taking a panorama of this region.

The people appear to be favoured of God as of heaven itself. The sun and moon do not appear to excite any unusual ideas here, although the former may be welcome in the morning, when they shake off the night's frost with the ashes, and in the evening to light them when they return from the chase, from labour in the fields, and from battle, or when they drive home their herds. The moon is of less service to them, for they go to roost with the fowls. The beneficent deeds of these two luminaries are too regular. But the canopy of heaven itself may direct their thoughts above ; from thence comes the rain, irrigating their fields, causing the stream to increase, filling and animating anew their large fish-ponds. God's water is allowed to flow over God's land, and they are pleased at the cheerful

harvest, without praying, beseeching, and returning thanks, for they may look upon periodical rain as a regular tribute from above. Heaven does not forsake her people here, and the inexorable sun, parching up everything, has perhaps never been worshipped by the Ethiopians.

We lie now to the eastern side of the island of Tshàuker. King Lākono visited us to-day a second time, and brought with him a young wife from his harīm. He took off his hand the orange-coloured ring, on which Selim Capitan fixed a longing eye, and presented it to him with a little iron stool, plainly forged in a hurry. The Crown-prince, Tshobè, has a very intelligent countenance, and seems to me to be a clever fellow. He wears no ornament on the upper part of his arms, except the two large ivory rings. Although it was known that he would succeed King Lākono, and that the latter had called him his eldest son and successor, yet the Turks believed that he was some relation of the king's, whom he had only brought with him to receive presents. I had, however, previously seen him with us, and remarked at that time that he kept back proudly when the others stepped forward for our gifts. But Lākono had only presented us with two oxen, and given us a verbal mandate to the republicans of the left shore; therefore, the Turks were discontented. Against all policy, the honour of a Turkish coronation-mantle was not conferred upon Tshobè, nor on the others who might have expected a dress. The prince took the miserable glass beads with a kind of indifference and contempt.

We gathered further intelligence about the country, and Lākono was complaisant enough to communicate to us some general information. With respect to the Nile sources, we learn that it requires a month, the signification of which was interpreted by thirty days, to come to the country of Anjan towards the south, where the Tubirih (Bah'r el Abiad) separates into four shallow arms, and the water only reaches up to the ankles. Thirty days seems indeed a long time, but the chain of mountains itself may present great impediments, and hostile tribes and the hospice stations may cause circuitous routes. These latter appear necessary, for the natives being already overladen with weapons and ornaments, it is impossible that they can carry provisions for so long a time, from the want of beasts of burden. There are said to be found very high mountains on this side, in comparison with which the ones now before us are nothing at all.

Lākono did not seem, according to my views, to understand rightly the question, whether *snow* was lying on these mountains. He answered, however, *No*. Now, when I consider the thing more closely, it is a great question to me whether he and his interpreter have a word for snow; for though the Arabic word *telki* or snow is known perhaps in the whole land of Sudàn, yet *that* itself is unknown. Whether these four brooks forming the White Stream come from rocks or from the ground, Lākono could not say for he had not gone further. With respect to the country of Berri, which he stated in his first visit was likewise a month distant, Lākono now corrected himself and said that this country is not thirty, but only

ten days' journey off to the east. He impressed on us particularly that copper is as abundant, and found there in the same manner as iron here. He appears, indeed, to wish to inflame our gold-seeking hearts by his repeated commendations of this country, on purpose that he may get possession, at one blow, of the treasures, with the assistance of our fire-arms. He expected an answer which could not be given him, because the Dinkani, who translated his words into Arabic, only told us (according to my full conviction) what he chose to let us know, most probably being induced by the other soldiers and sailors to do everything he could for our speedy return.

We also heard that on the road water is found, but that in Berri itself there is *no river*, and that the natives drink from *springs* (Birr). The people of Bari get their salt, which is quite clear and fine-grained, from thence. It is boiled in earthen pots, and retains their form. The language of the country of Berri is different from that of Bari. The blue beads, in the form of little cylinders, which we saw on Lákono and some others, and had even found previously, came also from Berri. We had similar-formed glass paste, of white and blue colours; but the higher value was set on the blue, and on the large, round, blue beads.

Commercial intercourse in Berri does not seem to be carried on in a very peaceful manner, according to what we had heard previously, and also now from some of the King's companions; for it is boasted that on the way home copper is plundered from the people on the road, with whom they take up their quarters, and who have it piled up in their houses. They say that the men on the copper mountains are a

very bad set; and that therefore they are obliged to take from them again the spears which they had given them for copper. In Berri also the people go naked, and there are few dresses such as Làkono possesses. The latter asserts that his dominion reaches seven days' journey further up the river. Much might be learnt if there were more order, on our side, in the questions; but they are jumbled up one with the other, and asked more for amusement than for scientific interests, without once reflecting whether the answer corresponds to the question or not.

The favourite Sultana had certainly not much to boast of in the way of beauty, but she was an amiable looking woman: she was not at all shy, and looked freely around her. A number of glass beads were given to her, and she was too much of a woman and negress not to be exceedingly delighted at them. Làkono restrained himself, as at the first time, on the sight of such presents, within the limits of pleasing surprise, without betraying the least symptom of the childish joy which is indigenous in these men of nature. She was, however, very cordial with him, and he with her; he helped her even to pack together her ornaments in a handkerchief, and gave it over to her with a benevolent look. I had the honour also of a friendly smile from her, which I naturally returned. She remarked this immediately to her lord and master, whereupon the latter bowed his entire approbation, and smiled at me.

This queen was very simply adorned for her rank. Her head was shaven quite bare, without a diadem and other ornaments; her hair, the embellishment of

woman, was therefore put to the sword, and with it also the first advantageous impression, even if the nose had not been slightly turned in. She was simply clothed with two leathern aprons, under which, through her continually shifting her seat, I caught sight of a rahât. A number of polished iron rings were spread over the joints of her hands and feet. A narrow ring of ivory was on the upper part of each arm; and around the neck a large iron ring, from which a great tooth, a flat little bell, and some other knick-knackereries of iron, hung down to her breasts, which are already tolerably withered, for she has probably borne children. She had red sandals on the feet, with little iron rings on them as ornaments. All the under part of the body was tattooed—this may be the sign of a foreign race; the nose also is of a different stamp to those in Bari. The root of the nose is certainly strongly depressed in these women, of whom I saw yesterday also some specimens, so that it forms, with the arched forehead, not an unpleasing waved line, terminating in a saucy point, without the latter becoming a flat knob. If we could have put into the mouth, where the four lower incisors also were wanting, a ducat, or perhaps a dollar, the teeth would not then have projected in the negro manner, and those blubber lips would not have been at all noticed.

The skull, throughout Bari, is not generally pressed back like that of animals, to the occiput, although the latter is strongly developed. I find, however, no difference in the form of our Egyptian thick heads directly they take off their tarbusch. The *fluidum primordiale* of the Barian power of creation must there-

fore have worked, in this mountain-land, with the same noble power as that of the land of Kashmire.

In other respects our queen was well formed, and the calves of her legs projected tolerably stoutly over the iron rings. Even in Germany she would have been considered one of the tallest of her sex, and here also her size would be surprising if she wore a long dress. She was at least five and a half Rhenish feet high, for she looked very comfortably over my head. On this occasion I discovered remains of ochre in her close-cut hair, a sign that she does not use soap. Her name is Ishòk; she could scarcely keep herself from laughing, and appeared to be very much flattered when she heard her charming name repeated by us several times. Làkono and his queen had brought a doll, representing a woman, hewn roughly from wood, as a present, which turned out, contrary to our expectation, to be only a doll; for they laughed immensely when we asked them whether they worshipped or adored it as a deity.

We could not get a clear conception of their ideas of religion—the less so, because the Tershomàn translating into Arabic was a heathen Dinkani. It seems that they worship a spirit of nature, for we had been previously told that their god was grander than the mast of our vessel. Whether they reverence him under a tree, as the criminal court of Làkono seems to denote, is a question I do not venture to decide. Horns, teeth, and amulets point to some sort of worship.

Without troubling himself further with farewell ceremonies, Làkono rose with his men; but his wife had previously looked at the carpet, gave him a

friendly dig in the ribs, and whispered a few words to him. The great king did not wait for this being said twice; he seized the end of the carpet, and gave it over, without further ceremony, to the slave close at hand. This carpet belonged, however, to Rassulla Effendi, who was the maùhn, or scribe, to Selim Capitan, and a Persian by birth. He drew a long face on seeing these proceedings, but was consoled with the promise of another new carpet, and the whole thing was laughed at as an ingenious trick.

A panorama, to which, however, the neighbourhood of beautiful mountain-forms lends the true charm, opens from the Island of Tshànkér. Opposite to us, on the right shore, we see the village of Wuàlana, and before it lies a shallow island, called Koriana; on the right shore lie, at a short distance from it, the villages of Harikono and Amrit. The houses of the villages are tokuls, part of them having higher pointed roofs. Shady trees stand around, and the copsewood enjoys such a verdant life that we might fancy ourselves in a northern region.

The mountains lie around in the following direction: Mount Lof-et rises behind Mount Pelenjà, to S.E. by E., at a distance of about four hours, like an isolated mountain of small height. Mount Pelenjà, to S.E., in tolerable extent, from its peak about eight hundred feet high, S.E., 60' to S. and 75' to E., some three hours distant, a small mountain group of a rocky nature, and partly wooded, completely secluded. The mountain chain of Logojà, where cannibals dwell, the anterior peak of which seems to project to N., rises at a distance of from eight to nine hours, to a height like that of the seven hills seen from

Cologne, with a lofty back, which appears, so far as it is not concealed from the eye by the mountains lying before it right and left, to extend from S.E. southerly 60° . long. The Hill of Liènajin, or Linanzin, a gently rising rock, covered with bushes, towards S.E. 50° to S., distant an hour and a half. The still smaller rocks of Arlu, to S.E. by S., two hours distant; the rocks of Luluri or Lullulù to S.E. 30° to S., one hour and a half. In the S. rises Mount Lugi, smoothed at the top, with precipitous disrupt walls of rock, which does not appear to exceed Korèk in height, and may have six hundred feet relative height. The river



MOUNT PELENJA.

MOUNTAIN CHAIN
OF LOGGIA.MT. KOKESCHIP, MT. KONNOPI
ISLAND OF KOBANA.

COUNTRY ON THE RIGHT SHORE OF THE NILE FROM THE ISLAND OF
TSHANKER, TOWARDS SOUTH-EAST.—27TH JANUARY, 1841.

winds a little to the W. around its base, and this mountain may once have formed a terrace, which has joined to the mountain chain of Kàlleri, lying behind to S.S.E., forming as it were the foot to the mass of mountains rising up in the S. We see on the unevenly elevated rocky wall of Kàlleri, the dry bed of a cataract, to which even the natives drew our attention.

All these mountains and rocky hills lie on the right side of the river. This coincides with what has

been said to us previously, and the plastic formation of the mountains themselves shews that the river does not break through from E. or S.E., and the natives are right when they place the sources of the White Stream to the *south*. On the left side of the river rises first, S.W. 3'' to W., Mount Lòngi, at two hours distant; Mount Lobèk, with a rocky head S.W. 28' to W., three hours; the flat, round Loffoni S.W. 30' to W. four hours; Mount Bio S.W. 60' to W., some eight hours distant, ascending again to a considerable height; Mount Korèk, already known to us, on the ground softly rising from the river; it is one hour and a half from the river, entirely of a rocky nature, intersected in manifold parts by steep disrupt walls of rocks, similar to quarries. All its peaks not only lie in the distance, where the whole mountain appears like a terrace, but also near at hand, in equal horizontal lines, from W. to 75" to N. It is perhaps not more than six hundred feet high, and it is the mountain that principally affords iron, although all the heights are said to contain the same.

As I distinguished previously Mount Nerkanjin on the left side of the Nile, by its height, so the mountains seem to increase generally on this side in height, as also the country from the shore to S.W. gradually ascends. Mount Konnopi or Kuno-bih appears W. by N., at a distance of from nine to ten hours, of light-coloured rocks, without any vegetation. It forms likewise a mountain group, with its six or seven peaks, which fall away tolerably steeply in convex lines, and separate one from the other. The high points of this group are of equal form,

and may rise to two hundred feet relative height. Behind this mountain and Korèk, a mountain-chain projecting on both sides of Korèk, which stretches itself for about an hour in length, extends in an undulating form, and loses itself to S. This chain is called Kugelù, and I calculate its distance at being at least twenty hours. To N.W. 73" towards N. lies Mount Lokùn, about two to two and a half hours distant, with a gentle slope of small height, and to N. the Nerkanjin already known to us, some eight to nine hours distant.

If we only consider the situation of these mountains generally, and the evidence of the natives with reference to the origin of the White Stream, who, from the moment that they stated the iron came from the mountains in the south (where we had already hoped for mountains), shewed their accurate knowledge of locality, and who here, also, transfer the sources of the White arm of the Nile from the foot of the mountain land *further to the south*, every doubt must be removed by the agreement of these expressions. Even among us the opinion was prevalent that the sources of the Nile should be sought to the east in a ramification of the Abyssinian chain of high mountains. We have therefore made close inquiries, whether any *running water* were existing on this side, and learned that there is not; for the people in that part, drink, on the contrary, from *springs*. Nature seems here to have formed, generally, to the east, as well as to the west, a watershed.*

* A water-shed is the geographical term for a mountain-range, which causes the rivers rising on them to descend in different directions.

In S.E. Mount Logojà is seen, at a distance of eight to nine hours, a chain of mountains stretching from E. to S.; in the west rises Mount Kugelù, twenty hours off, like a long serpentine track, which must be in proportion to the presumed distance, as also its height to the near rocky mountains of considerable elevation, and seems to extend likewise to the south. Both mountain chains may, in consequence of these exterior plastic proportions, rise up like branches to the mighty trunk of mountains in the south, as the natives on the Island of Tshàncer endeavoured to shew me when I was sketching, by uttering names and making unmistakable gestures. This mountain-stock, perhaps a second Himalaya, may form the combination of streams of the White Nile between these its sides. The river here formerly broke violently through its projecting base—isolated Mount Lugi, which is like a half demolished pyramid, and rushed down over it like a powerful waterfall.

Selim Capitan made three observations upon the Island of Tshàncer, and the northern latitude was confirmed as $4^{\circ} 30''$. The stream, having a direction to S.S.W., is found to be three hundred mètres* broad, from the island to the right shore. The two arms of the river may amount to something over one hundred mètres from the island to the left shore, before which another little island lies. A rocky bar of gneiss extends here from E. to W. right across the stream, and continues beyond the islands, the highest points of which it forms, to the left shore, where we may follow the traces of this rocky bank to a still greater distance, for it projects in a slight breadth

* A mètre is equal to 3·281 English feet. (Trans.)

over the ascending grounds. This reef, running from E. to W. which may give the direction of the succeeding chasms in the valley broken through by the stream, rises in the middle of the river to a larger rock, and other blocks peep out of the water towards the right shore, whilst the other rocky part towards the Island of Tshàncer is only superficially covered by water. The current gushes by the before-named rocks as at the Bingen Loch,* and it is only there where we may expect to find a passage.

Our Arabs are glad at this tschellâl, as they call a waterfall, or even a current, and want to take it immediately for an insurmountable wall, even before sounding the passage. The conchylia, similar to oysters, clinging to these gneiss rocks, are the thorn-muscles, which are found also at the cataracts in Nubia (*Etheria tubifera*). By mistake, I previously called these muscles *ampulla tubulosa*.† Besides the snails mentioned on a former occasion, I found on the shores of the White Stream the large water-snails (*ampullaria ovata* var.), as well as the muscles (*Iridina rubens*, and *Anodonta acuta*).

The specimens of sand I brought back with me, and which were subjected to an examination in Berlin, with my other geognostical collections, have been already defined by Dr. Girârd, in C. Ritters' "Glance at the Source-Territory of the Nile."

He says :—"A sand from the shore of the Bahr-el-Abiad, in the kingdom of Bari, is similar to this sand (from the Sobât river), only a little coarser in the grain, which, however, is only at the most of the size

* On the Rhine. (Trans.)

† Corrected in this translation. (Transl.)

of millet-grain: it contains principally quartz, but more mica than the former, and has considerably more of those black grains, from which we see that it is horn-blende. This is either derived from syenite and diorite masses, as they often appear in gneiss and mica-slate mountains, or they might be also of volcanic origin, for the lava of the Gebel Defafaungh lying to the north boundary of these plains, contains the same in great abundance." With respect to the constituent part of the rocks of this cataract, Dr. Girard observes:—"It is gneiss, consisting of white feldspar, and a good deal of white mica, and mica-slate, containing much granular, brittle, white and yellow quartz, no feldspar, and small scaly black mica."

The island of Tshànkèr, on which I planted a number of palm-seeds, rises, with reference to the back of the surface of the earth, fifteen feet high above the present water-mark. The natives could not have been able to have sown the ground, which is strongly mixed with sand, with the simsim (sesame), a grass particularly requiring moisture, if the water of the swollen river had not remained upon it for some time. In accordance with that, the chain of mountains must have discharged an immense body of water during the rainy season, for the island appears to me to lie somewhat higher than either of the shores, and the high water overflows therefore not only this island, but also a great part of the shores which are separated about six hundred mètres from each other. From this cause arise the beautiful green trees, and the verdant low country lying back, from which ephemeral shallow lakes the water seems to be drawn off by canals. Like Oases (Arabic Oà), they

lie there in a level land, which is parched up far far and wide.

Legislation appears to be in a peculiar state in the country of Bari. We were told that King Làkono slew criminals with his own hand, by a thrust with a spear, and very quickly (goàm, goàm), without any ceremonies; he sits under a large tree, with a heavy spear in his hand, to pass judgment, and assumes a very angry look. Perhaps the great spirit of the tree may inspire him on such a presidency, or rather his own feeling of justice may cause this righteous anger, and make him the supreme judge and executioner of the misdoer, the latter being devoted also to death by the unanimous will of the assembly. Priests or sorcerers do not appear to be assembled at these public sittings in judgment, which remind us of the ancient German institutions, because not a trace has been found, so far as I know, of any such men among these people. The great king, therefore, does not crack the criminal's skull with the club-sceptre he usually carries, as I imagined on his first visit; but the very same views of a death without dishonour seem to prevail here as among the Shilluks, who do not slay the Arabs taken prisoners by them with the honourable spear, but beat them to death like a dog with the hassaie.

The innate respect towards the king is, however, greater perhaps than the royal power. This may mostly be reduced to the gigantic limbs of his family and all his adherents, amongst whom the heads of tribes subject to him, may be numbered, who stand around his free stool as judges armed, although not voting, maintaining order, and easily defeating his

solitary antagonists, with their heavy sceptres of ebony, like constables' staves.

It is evident that he has opponents, and indeed not a few, from the circumstance that he requested us to shoot some people on the left shore, because they were always making war on those of the right shore. It might therefore seem quite right to him that several of the inhabitants of that side were shot down a few days ago, in so shameful a manner, from our vessels. His statements of the hostile feelings of the men there does not appear, however, to be founded on truth, for we have seen several times herds of cattle swimming over from one shore to the other, without any robbery and contention taking place in consequence. On a closer inquiry, his main grievance was unbosomed; for two years he had *not* received *anything* from the people of the left shore. This was interpreted, consonant to Turkish views, to mean Tulba (tribute); it seems to me, however, to denote rather a voluntary contribution, because he complained at the same time, that he had nothing to live upon, and therefore was not able to give us anything.

King Lâkono had a very sound understanding, and contrived skilfully to evade the demand for meat, and the desire expressed to visit him at his residence; for the Turks wanted to make a closer inspection of his treasures, since gold was said to be among them. He always affirmed that we should be obliged, in paying such a return visit, to swim through a deep goliir, although we had been previously told that he possessed a large and handsome sùrtuk, in which he plies far up and down the river. Our sandal, which appeared to him probably more fitted

for use than his own hewn-out trunk of a tree, pleased him so well, that he asked it as a present. Of course we were obliged to refuse him; for this little skiff was quite indispensable to us for communication. It was promised that a far handsomer vessel should be built for him at Marseilles—a white lie, with which he did not seem to be content. It was tolerably plain, from the badly translated expressions of these lords of Bari, and still more from the far more intelligible language of signs, of which they were not sparing, that they were perfectly conscious of their superiority in force; for they signified, with ironical laughter, that they could easily take our sandal by force, because it was the smallest of our vessels.

Although Làkono seemed not to have expected such an answer from us, and to be offended at it, yet he did not relinquish his plans of conquest and booty, in which we were to assist him. He wished not only to undertake a warlike expedition, in company with us, to Berri, so rich in copper, but also to the neighbouring mountain-chain of Logajà (also Lokonjà). The cannibals dwelling upon this mountain—not known here, however, by the name of Njam-Njam—had been long the subject of conversation among the crew. According to what we heard from the natives below, these ill-famed mountaineers had heads, and went on all-fours like dogs; this was repeated also, even in Bari, probably from our misunderstanding the language.

Captain Selim, the Muscovite, to whom courage could not be denied in other respects, had, even in Khartùm, been wonderfully afraid of these so-called Njam-Njams.

Now, however, he allowed his fear to mount to a truly ridiculous height, probably because he was the most corpulent of us all, except Selim-Capitan. He thought nothing less than that he would be the first roast morsel which that savage mountain-race would choose for a feast, on a favourable nocturnal opportunity. Before the first expedition, my brother had designated him a plump morsel (*kabâb semmin*) for the cannibals; and scarcely was he summoned to this expedition than he inquired repeatedly and anxiously about the existence and the abode of these men. This joke was now haunting his brains, and particularly when his fat face was lighted up by the enjoyment of araki, which he drank secretly in his cabin, in order not to let the others partake of it. In such a condition as this, he exhorted me to assist in urging as speedy a return as possible; and, moreover, to think of my poor brother Jussûf, who perhaps was ill.

Lâkono, explained, on closer questioning, the ominous rumour of the Anthropophagi, with dogs' heads, and informed us that these bad people have heads indeed, like others, but allow *all their teeth* to remain in their head, and crawl *upon all-fours* when they eat men. This means, perhaps, nothing more than that they do not join in open combat with the inhabitants of Bari, but crawl close to people, like dogs, plunder them, and perhaps eat them. The Baghâras assert, that the same custom of crawling, in marauding expeditions, exists among the Shilluks; and our Circassians relate things, which are scarcely credible, of the manner in which boys and girls are caught in their country.

It was *confirmed* here what we had previously

heard, viz. that brothers do not marry sisters, nor fathers daughters; they were indignant, and with reason, at such a question. The bride is purchased from the father for sixty to seventy oxen: this price might be called dear, in spite of the numerous herds of cattle here; yet it counteracts polygamy and the enfeeblement of race thereby produced, as much as the forbidding of marriage among blood relations. The release of a prisoner costs only thirty oxen, whence we might conclude that their wars, which they appear to carry on only by the river's side, are not very barbarous. Besides, their spears confirm this supposition, for they are ground off to a smooth edge, and have no barbs such as those of the people of the mountains in these regions, and in the land of Sudân.

The spears with barbs found amongst them, have been either received in exchange, having been thrown by the mountaineers in the mutual feuds, or they have been forged by themselves for the chase, to cast at the wild deer when they hunt them to death. The poisoning of arrows, with their various barbs, is certainly against this humane view of the character of the people. They warned us of poison every time we purchased arrows, yet I found a quantity among them not poisoned. It may therefore be usual to use the latter only in war, because otherwise they would poison their spears; whilst they shoot the deer with the former, without the poison perhaps exercising any effect when the flesh is eaten—as Shömburg says, is also the case in Guiana. They bury their dead in a recumbent posture, and far away from their huts or tokuls.

According to Lākono and his relations, the rainy

season will set in, in *two months* from the present time, (therefore at the end of March, or beginning of April.) This appears, in truth, somewhat late: for the two arms of the Nile, near Khartùm, begin to ascend nearly simultaneously on the 2nd or 3rd of May, and it is impossible that even one drop of these first rains in the high land, which the thirsty soil, moreover, immediately absorbs, and which are swallowed up by a course in a long valley-land, should reach Khartùm from hence in so short a time. The regions lying lower, and subject to the tropical rains, are the cause perhaps of the first swellings to the White Stream; for, before all those numerous low grounds and shallow lakes are full, the eventual connections with the more distant inner waters, are restored and overflow. Much more time is required for this than for the effusion of the mountain waters, near the sloping rocky ground lying before us.

If we should not, however, take the nearer district of the tropical rains as an explanation of the simultaneous swelling of both arms of the Nile near Khartùm, we could not explain this phenomenon, for the mountain waters of the White Stream must, though with a far slower course, make three times as long a way as those of the Blue Nile, in just the same time. A difference is consequently seen at Khartùm at high water, which, however, soon becomes equal, from the mutual pouring into each other of the arms, or by the damming up of the tributary streams.

Fadl is my faithful confidant in purchasing the curiosities of the country; he is slow and painstaking in a negotiation, when I immediately lose my patience.

He first, for a long time, squats, as he used to do in the land of Sudàn, with the people here; plays with the glass beads,—holds the larger ones by themselves against the light, as if they were jewels; and the good Ethiopians become so confident and longing, that they can hold out no longer; and then he is very slow in giving any, so that the value increases in their eyes. They are not only, as I have before said, very mistrustful in this barter, but also so undecided, like children, that beads and goods are often given away and returned. I have some hopes that my Ethnographical collection will increase considerably in this manner during the return voyage, for we have already exchanged many weapons and other things.

The spears of this country are distinguished by a greater elegance in the workmanship, and do not exceed the length of the gigantic bodies of these men. With the exception of a few, they are javelins, seven feet long, with a shaft of the thickness of a thumb. The shaft of bamboo is encircled entirely, or partly, with a narrow band of iron, or with the skins of snakes and land crocodiles, and the lower end surrounded with an iron knob and single rings, in order that the spear may have the proper equilibrium in the hand when it is hurled. About half a foot from the end it is generally furnished with a tuft of fur, which seems to stand in the place of a *feathered* arrow, a weapon never seen here. The iron of the head is one and a half to two feet long, the back flat, and the knob has four little bosses.

The bows are from five and a half to six and a half feet long, of bamboo, and encircled in the same

manner ; the strings are made from the inner bark of trees. The arrows are very neatly wrought, have barbs, and are two and a half to three feet long.

The harpoons employed against crocodiles and hippopotami, have, with the short point, which has only one barb, a length of thirteen to fourteen feet. The shank, of bamboo, is an inch and a half thick, and is not fastened to the point (neither are the shafts to the heads of lances, so that it comes off in launching the harpoon. The point itself remains by a long thin line made of bark, in the possession of the fisherman, and is always visible to him at the end by a float of ambak wood, until the animal struck has exhausted its rage ; and then, sitting in his hewn-out trunk of a tree (sürtuk), he takes the line in his hand, and with a spear attacks the exhausted beast as it comes up to the surface for air, until it bleeds to death.

The ivory rings, two of which are often seen on the upper part of each arm, are two pounds and upwards in weight ; the fluted clubs of ebony are two to three pounds. The knives are crooked, rounded at the top, and half a foot long, with a handle one and a half or less in length. The people procure the materials for their beautiful works in iron from Mount Korèk, in the tanks and gohrs of which iron is said to be found, like sand, in immense quantities. They brought me a little basket full of this coarse-grained black mineral, and with it a few scorix. According to Marian, the men smelt in earthen pots ; for furnaces and such like are as little to be looked for here as in Kordofàn.

This is pure magnet-iron, which, as my Nuba thinks, they free from the larger stones, and then

shake in a sieve, to free it from the fine rocky sand. Girard says that this magnet-iron shews also, in several places, specular-iron, and recalls to mind similar appearances in the great Mica slate chain of mountains of the Brazils. The specimens of stones procured from Mount Korèk, through the natives, were of a reddish coarse-grained granite, although we had expected gneiss from thence, having found it near and upon the island of Tshanker. Yet I would not be certain that these specimens were not taken from some other mountain. What rich results might ensue from an examination of these mountains !

CHAPTER IV.

KING LAKONO'S PRIDE.—BEER KNOWN TO THE ANCIENT EGYPTIANS.—BAR OF ROCKS.—WAR-DANCE OF THE NATIVES.—DETERMINATION OF THE TURKS TO RETURN, AND DISAPPOINTMENT OF THE AUTHOR.—COMMENCEMENT OF THE RETURN VOYAGE.—REPUBLICANS IN THE KINGDOM OF BARI. —VISIT OF THE FRENCHMEN TO MOUNT KORÈK. — REASON OF THE AUTHOR'S AVERSION TO ARNAUD.—CONDUCT OF VAISSIÈRE AND SCENE IN HIS DIVAN.—CULTIVATION OF COTTON AT BARI.—APATHY OF FEIZULLA-CAPITAN AND THE CREW.—SUPERIORITY OF MAN TO WOMAN IN A NATIVE STATE.—WATCHHOUSES.

26TH and 27TH JANUARY.—King Lākono, notwithstanding his complaisance in other respects, is proud in this single instance: he will not go on board any *other* vessel than that of Selim Capitan's, much as Arnaud wishes it, who promises us a great *fête* when we shall bring this to pass. Selim Capitan passes with him for a matta enjoying the same privileges as himself, because he has our treasures, glass ornaments, and clothes, in his keeping, and distributes them *ad libitum*, with the consent of Suliman Kashef.

The island of Tshanker, called also Riëm to Selim Capitan in my presence (perhaps the name of the second and smaller island), has become, since our abode here, a market for barter. A great crowd of people is always collected here, and Selim Capitan considers it advisable to give them a taste of the effect of a gun. He therefore shot a bull while running, twice in the head; unfortunately the balls

did not pierce through, and therefore the beast staggered, but did not fall. Hereupon Selim held the barrel behind the animal's ear, and the bull fell; the people, indeed, drew back astonished, but the excessive fear of fire-arms appears, since our short stay, to be at an end in the more civilised state of Bari.

I was the cause of presents being made to Làkono, for future sowing of maize, and a better kind of durra, Ommòs (Egyptian peas), and the so-called horse-beans, (called by the Arabs, Ful, and a very nourishing favourite food of theirs,) beside many other fruits. He seemed to me to be a man who would take care to sow them, for he planted even the stones of the dates which he had eaten with us. If the dates in these warmer regions should ever come up, the whole crew, without meaning it, have contributed to plant them, because they threw away the stones of the dates they ate on all the landing-places. I doubt, however, if dates will ever thrive, because the doum-palms have a very stunted appearance in the lower countries of the White Stream, and for a long time have entirely disappeared.

As the vine thrives in Sennaar, it might grow also here, and I should have gained immortal fame if I had not unfortunately forgotten, in Khartùm, the layers of vines I had determined to take with me. Merissa is also not unknown here, as the black soldiers told me, who had drank it, and found it equally good as that of Sennaar. *Beer* was known even to the ancient Egyptians: what is now prepared in Egypt under the name of Busa, from wheat (kamm) is bad and pappy; in Nubia, Belled-Sudàn, we get it of

better quality, made from durra, and called generally merissa: the same is also quite a common drink in this country. Beer appears, consequently, to be generally indigenous where agriculture takes place, and where wine has not received the preference due to it.

28th January.—Nature has drawn here a real bar of rocks through the White Stream, which we dare not venture to surmount; for the water has fallen, for some days, as is quite evident, and the vessels could only, by taking out all their freight, pass the defile near the large rocks, which is called on this account, bab, or gate. The river-bed beginning from hence, appears to be generally of a more rocky nature, for we perceive, even from the rocks on the Island of Tshanker, breakers in the stream up the river: however, there is no doubt, that we might sail away victoriously over these obstacles at the time of the inundation, for the river here rises to about eighteen feet high. The main thing would be, then, for north winds to blow exactly at this period, strong enough to withstand the pressure of water rising in this mountain-land; for I am still of opinion that the rapidity of the current increases from hence in such a manner, that we could not advance by the rope even with the best will. We have remained here at the island three entire days, and the *ne plus ultra* is not so much inscribed on the Pillars of Hercules in the water, as desired in the hearts of the whole expedition.

The war-dance, which the blacks performed yesterday, has contributed certainly to the final determination to return. Even I thought yesterday that I

heard and saw in the fearful battle-song, a declaration of war, and a challenge to the contest. It was almost impossible to persuade oneself that it was merely a mark of honour. The natives marched up and down the island, in columns, brandishing their lances in the air, sang their war-songs with threatening countenances and dreadful gestures, then fell into still greater ecstasy, ran up and down, and roared their martial chant. Nevertheless I altered my opinion that this was done with hostile views, for the native interpreters remained quietly with us on board the vessel; and when we sent them to request that this honour might not be paid to us, they returned, though not having effected our object.

It was thought advisable that we should leave the shore, for the natives had only need spring down to be on board our vessels. There were certainly too many black people, and a warlike rapacious enthusiasm might easily, it was true, possess their minds, inflamed as they were by the military manœuvres. It was well, therefore, that a reiterated request on our side was answered, and an end put to the warlike ceremony, without our having betrayed our fear, by pushing off from the shore.

I remained this night on board Selim Capitan's vessel, to induce him to *renew* the examination of the rocky pass in the water, and to allow me to accompany him; but he declared to me, although he could not conceal his own nervousness, that not only the Frenchmen, but also Suliman Kashef, even if the latter told me the contrary, have determined not to proceed further. I knew therefore how to explain

why Selim Capitan and Arnaud had gone alone to the rocky pass, without letting me know of their intention, although the spot to be explored, where a passage possibly might be made, was scarcely a gun-shot distance from us. I felt myself, however, too much weakened from my illness to swim to it, and to scale the rocks, for I would not ask the favour of the sandal. My servants, who wished as much as myself to proceed further, had been at the place; and Fadl, who had been previously a mariner himself, declared that we could certainly pass through, but not back again, if the water continued to fall so much as it has done now for some days.

Selim Capitan was really inclined to explore the ascent, but this continuation of the voyage was not to last longer than a day. But when he knelt this morning on his carpet, before sun-rise, directing his face to the East, for prayer, and discerned the numerous fires on the right shore, which he had not remarked during his ablutions, he looked at me so mournfully and suspiciously, that I could scarcely restrain my laughter. He concluded his prayer; and now he saw also on the island of Tshanker, near us, a number of such little straw fires, over which the naked people were warming themselves; whilst nearly every single man was stretching out his long legs over his own little fire. Then his courage sank anew, for there were still more blacks than yesterday.

These men, however, did not come empty-handed, and barter rose to a pitch of greatness and variety, such as we had not before seen—a quantity of fowls, goats, sheep, cows and calves, wood, ferruginous sand, and iron dross, tobacco, pipes, simsim, durra, weapons,

all kinds of ornaments for the body—everything for beads. Nevertheless the good Ethiopians did not shew themselves to-day quite blameless, for they sold quivers full of arrows, many of which were without points. They delivered the wares while receiving the beads, or the seller ran hastily away, retaining the goods as well as the purchase-money; they cuffed and wrestled with our men, without, however, making use of their weapons. On the whole, however, the injustice was on our side; the drum therefore beat to recall the crew to the vessels.

It was the middle of the day, about two o'clock, when Selim Capitan, in order to take his leave, and to employ the dreaded people at the moment of our departure, and keep them far from us, threw ten cups of sug-sug on shore, and the cannons on all the vessels were discharged, to bid solemn farewell with twenty-one shots to the beautiful country which must contain so many more interesting materials. The forty or forty-two days lost by Arnaud's fault, in Korusko, are again recalled to my mind. If we had arrived here twenty days previously, neither would all these rocks have been an obstacle, nor would there have been a pretext for not proceeding further; and it would have been no absolute misfortune, supposing that in our *return* we had not been able immediately to sail over this reef of rocks.

Rain begins here, as I have already said, in two months' time. On its setting in, the neighbouring masses of rocks discharge their water into the river-bed; the river rises after a few days, and it would not be difficult, therefore, at the expiration of that time, to pass the rocky bar. But against the proposal

to wait for the rainy season, the objection, partly founded in fact, was offered, that the provisions which had been provided for ten months, would not suffice for the return voyage. Certainly the provisions had been shamefully dealt with, and there was little to be expected from the people of this country, who *would* be paid for every thing. It is just as clear that the natives do not cultivate agriculture beyond their immediate necessities, and therefore have stored up no magazines, as that their herds are only sufficient for their consumption, because, had it been otherwise, the Sultan, leaving aside the people, must have shewn himself more liberal. It is certain also, that with the hitherto lavish profusion of glass-beads, their value must infallibly decrease, and that therefore we shall soon be in want of this means of payment.

The principal reason, however, of my proposal not meeting with favour, appears to me to lie in this, that a sudden attack by the natives was feared, and not entirely without justice, on a longer and closer acquaintance, by which our supremacy, at all events, must suffer; because Turks wish always to remain Turks, that is, born lords of the earth. As a last resource I rely upon a third expedition, and this thought afforded me also some consolation.

The water has diminished to a remarkable degree. Close to the first island, which is next to the left shore, we ran aground, and now we have been squatting for several hours near the second island, lying at the left shore. All "lissa" and "ela" cannot bring us from the spot, although the men, who are trying to raise the vessel in the water, have rested twice from exhaustion. The negroes,

indeed, approach us and laugh, but they may wish, notwithstanding, to assist us; yet it appears advisable to keep them at a distance by firing, so that they may not remark the impotency of a vessel when stranded. I here count, from the deck, eight villages on the rising ground of the left shore; on the right, lying more level with the water-line, only two. The sun sinks behind Mount Koròk, and we hope to work ourselves off this time. This may be a difficult return voyage, for we have many shallow places to pass, and the water continues to fall. We are again afloat at sunrise.

Behind the last-mentioned island we remark another little one; then we pass between two islands, for this voyage by the left shore is of a very complicated nature. We are scarcely off before the vessel immediately again sticks fast, and whirls round like a top. We proceed down the river close to the left shore, the negroes throwing stones at us; we know not whether they are in jest or in earnest. To be sure, we did not conduct ourselves in a very friendly manner, in our ascent by the *left* shore, having killed there eleven people, and certainly wounded many more. These are the republicans, who would not recognise King Làkono; they laugh at the threats of the crew, until Feïzulla Capitan orders his pistols to be brought, so that he might intimidate them. We shoal again, work ourselves clear, but cannot reach the other vessels, where Làkono is said to be on board Selim Capitan's. It seems that the good king will regain, by our presence, his authority, which has been considerably diminished by the withdrawal of the subsidy, or Tulba, over these people on

the left shore, who are to give us, according to his promise, several cows.

I cannot yet recover ; but just at this moment, when the vessel has turned to the north, in the direction of my brother, I resign myself, with pleasure, to the idea of remaining with Lākono, learning the language, and collecting the necessary information, making myself useful in extending the knowledge of economical and technical sciences, and taking part in their military expeditions, wherein I should have formed a fearful *avant garde* with my three servants, who were of the same inclination as myself, owing merely to our fire-arms ;—and thus to become of the most vital importance to the next expedition, and to be able to return with it.

Selim Capitan communicated to me, in confidence, that the French heroes want to visit Mount Korèk, here from the left shore, and that Arnaud has applied for an escort of ten soldiers. This intended excursion had been kept secret from me ; either I was considered too weak, as perhaps really was the case or no German witnesses were wished to oppose, as they very certainly would have done, any future charlatanry. I had full satisfaction, however, when I recommended, in presence of Arnaud, a visit to the iron-mines of Korèk as being perfectly necessary. The crafty Selim Capitan said, that he had spoken to Suliman Kashéf, and that a hundred chosen men, as an escort, were placed at disposal for this laudable visit. This offer of increased protection produced a peculiar effect in Arnaud's countenance, and he muttered a curse between his teeth, although I declared that I could not be of the party.

What I said was meant in earnest, for I must have been carried, owing to the want of beasts of burden ; and besides, I did not dare at all to expose my worthy head to the sun's rays, because, from having remained under it, I had still the feeling as if my hair stood erect, like a conductor of caloric, by every single ray. Mount Korðk will, therefore, for the present, not be explored by me.

I must take advantage of this opportunity to mention a circumstance which may explain my not very great friendship for Arnaud, abstractedly from his general arrogance. Selim Capitan confirmed what the merchant Olivi had communicated to me in Khar-tùm. My fellow-travellers, in order to make themselves secure against any control, had determined, under the presidency of Vaissière, *not to mention my worthy name at all in their journals*. But the honest Vaissière had, at the same time, another plan, which was no other than to *exclude* me from the expedition. He himself offered to provide the biscuit necessary for me and my three servants. This proposal was the more acceptable to me, because all the baking-ovens of Khartùm had been taken possession of by the Government, to provide for the crew of the expedition.

The biscuit arrived safely the day before our departure at my house, just as Doctor Count de Domine, having returned from Kordofàn, was present. Without further investigation, I took the contents and weight to be correct, but my Italian friend thought that Vaissière was a great "baron fututto," and opened a sack, from which an excellent biscuit peeped forth smilingly. This, however, did not convince him long ; I was obliged to order Fadl, who was

standing by, to shake out the bag, and then a peal of laughter resounded on every side. Only the uppermost part of the sack was laid over with good biscuit, the lower part being full of spoiled and mouldy ones. The very same result followed with the other sacks.

Armed with my heavy iron stick, I immediately ran along the side of the water to the divan of Vaisière, where I found all the Frenchmen assembled. I said plainly that he wished to force me, by this rascally deception, to desist from the voyage after one or two days' further progress. In conclusion, I called him a slave-dealer, whose cross of the legion of honour I would tear off; and when he talked of being an officer, and "honour!" I called him a cowardly rascal. None of the Europeans spoke a word in his defence; and I was able to retreat through the numerous attendants, who feared my iron club as well as the Basha; and I went to the governor, who gave orders that the needful biscuit should be provided me from the shune.

Once again, before my departure, Vaissière and I stood suddenly, man to man, on a narrow path by the Blue Nile, where, from fear, because he had not challenged me, or lest I should push him into the water, he only stammered out the words, "Wife and children!" In these countries one must either let oneself be trod under foot, and be able to turn and cringe, or must step forward, like a man in his natural state, breast to breast.

29th January.—Before sunrise we hoist the anchor from the middle of the river, where we had halted for safety during the night, and set sail in a northern direction. Some elephant-trees, with thick foliage,

and two villages, are on the left side of the shore, and a shallow long isle, like all the islands of this region. On the right Mount Pelenja, as well as an isle, which another larger one immediately follows. We see two magnificent broad-leaved acacia-trees, to which several more of these beautiful round-headed trees join on directly, and habitations right and left. The sun rises behind clouds. We row E.N.E., and then E. by N. The right shore forms a long durra-field; in its neighbourhood we get aground, and in spite of every exertion, remain fixed until half past nine o'clock. The strong north wind drives our vessel about in all directions, and the tired rowers are no match for my bold countryman. At half past ten o'clock we arrive, in an easterly direction, at the shallow island, separated from the right shore by a narrow arm of the Nile, and lying on a level with it. This island, planted with durra, is the very same one where King Lākono first visited us.

We have the other vessels ahead, waiting for us, and we come up to them at eleven o'clock, with great difficulty; for the men can display but little vigour at the rope in the water. The negroes of the right shore pursue us with several bundles of wood, to sell to us. Feizulla Capitan is ashamed to make his report, on account of his long delay, and therefore lies down to sleep. We cast anchor also in the middle of the river; for we trust the natives no longer, and fear the wrath of the great Matta.

King Lākono sits on the shore in the centre of his people, who are standing around him; his favourite wife is also standing, and only one of his brothers is sitting near him. I now hear that Lākono had

asked Selim Capitan for a musket to shoot the cannibals. The latter feared that the Tubal Cain of Bari might establish a manufactory of guns, and then come as a great conqueror to Sennaar, and therefore flatly refused him. On this account his Majesty is angry, and will not come on board. I am particularly sorry that he does not take leave of us, for I had noted down several questions which I should like to ask him. A drummer close to him is beating very skilfully, from time to time, on his long wooden kettle-drum, and answers quite doughtily the roll of one of our drummers. Another is blowing a wooden trumpet, in which the mouth-piece, or the hole at the upper end, is like that of a flute. They have also a twisted antelope's horn, from which they manage to elicit several notes.

Notwithstanding the violent north wind, we set out again at half-past one o'clock, without even thinking of a visit of reconciliation to Lākono. What can the man think of us now? We who have got so many weapons, spears, bows, and clubs, from his people, and who certainly, in his eyes, have equally as many guns, do not give him even a single musket! We row at first, but soon tiring of this work, the vessels are allowed to drift with the stream, "Allah kerim," and be tossed by the wind wherever it may drive them. We therefore knock one against the other, run towards the shore, and go, to my extreme anger, down the river with the stern foremost instead of the bow. This does not seem to Feïzulla Capitan to be any disgrace. To the right shore a shallow island, partly cultivated, and having, at the extremity of its foot, a little village. Another, upon which are

several cows, who have only to thank the strong wind that we did not carry away some of them, stretches far downwards for nearly an hour.

Here I must express my surmise that the natives cultivate cotton, although not, perhaps, in large quantities. On the island of Tshanker I had seen already cotton offered for sale, without its existence being a matter of surprise to me; for I had previously met with it in the forests on the White Stream, growing wild. I am in possession even of a specimen of the cotton of this country, and know now how to explain from what the rahât is made, which I got on that island. I was sitting once on the island of Tshanker, and sketching, when a young woman stationed herself at some distance, and pointed to her neck, which she wished to adorn with beads. I presented her with some to look at, and gave her to understand by dumb-show, that I wanted to have her thread apron for them. When I stepped nearer, however, to make the thing more intelligible to the woman, she drew back timidly. I therefore beckoned to Fadl, because he has more patience, and a darker colour, which must inspire greater confidence. She was no longer afraid when he came, but stopped and gave her consent to the sale by signs, although the men standing in the neighbourhood threatened her by elevating their spears. She motioned to Fadl to remain where he was, ran away, and soon returned with a leathern apron, which she had fetched from behind a rock, whereon men were standing.

Without troubling herself further about their threatening attitudes and words, she waded, with a true contempt of death, up to her breast in the

water, and came out again with the rahàt in her hand, and the leathern apron round her loins. She still paid no regard to the continued threatening motions of the men, but gave the rahàt over to Fadl, took the few beads, and ran away in the greatest joy. This rahàt was twisted together very artistically of cotton threads, shaped, as I have already related, and coloured red with ochre.

Four o'clock. Our course which, judging from the situation of the mountains, had been north-westerly since half-past one o'clock, now changes,—without, however, our being able to define it distinctly. Half-past five o'clock. This is the first moment that we can say we are going N. by E. These things must be experienced: to be ill with Turks—to make campaigns and journeys with Turks—and to undertake a voyage of discovery on the White Stream with such a fleet!

The vessels, according to their different sizes, ran on the sand-bank; first forwards, then backwards,—now right, now left. To navigate with the stern foremost is the favourite custom; the sparks of the fire fall through the open hatchway, before the half-broken door of the powder-room, and whizz in the water of the lower hold! At last, by energetic threats, I wake Feizulla Capitan from his dreadful apathy. The fire is extinguished, and the stern of the vessel, after a great deal of talking about the disgrace to a naval officer educated in England, turned to the proper direction, with the assistance of the oars.

I saw five large and small islands, but whether they lie nearest to the right or to the left shore, I know as

little as upon what shore the isolated villages and tokuls stand. It was really enough to drive one mad to see the sailors so often apply themselves to the oars when the wind had turned the vessel, which they regard as a piece of floating wood, towards the mountains. I shall, at last, be confused myself in such a disgusting hurly-burly. Six o'clock. On the left, a little island; soon afterwards, on the right, a larger one, separated from the right shore by a narrow arm. Then a village, close upon the same shore, pleasingly enlivened by men and cows, immediately appears. Single trees extend behind it, and give a picturesque effect to the whole. On the left, our old acquaintance, Mount Nerkanjin, steps forward again, and surpasses, at least, considerably in height, the mountains lying nearer. At half-past six o'clock we go to the N., with small deviations to one side or the other, and come to three islands, following close behind one another, along the right shore, and anchor, when it becomes dark, before seven o'clock, below the last one.

30th January.—A very strong wind all night; the vessels lying awkwardly near each other, beat their heads and knock their ribs together, so that it was quite pleasant to behold it. Every one slept and snored around me, and I also would not allow myself to be disturbed any more, and did not wake the capitan; but looked, however, twice through the open hatchway into the hold, to see if the water were increasing. This morning there was only one vessel at the anchorage; all the others were scattered far and wide down the river. Immediately after sunrise we set out towards N. On the right a wood extends;

on the left, solitary beautiful trees rise ; but few people are to be seen.

Two little islands are at the right shore ; the one lying deeper rises from the water like an elevated green shield. The beautiful forest of the right side condensates and strengthens ; on the left, also, the trees approach closer together. The country rises here, and we look far over the left shore into the land, as into an orchard, with villages. We halt at the shield-island, on the sand, and look around us for another water-track. With much difficulty we work through between the green reed island and another one, and land at our old little isle, where we made the acquaintance of the chief Nalewadtschòhn on the 22nd January. We had half an hour's barter ; then we push off, and navigate with the bow of our vessel directed towards the first of the two islands lying one behind the other, at the left shore, as if we would have caused there an earthquake. The vessel turns, and we go now again with the stern forward, as generally happens upon the Nile, in order to let the vessels drift free from danger, for the helm then becomes the scenting-nose of the shallows, and stops also, in fact, on them.

About eight o'clock we halt at the left shore. I get here a harpoon among other curiosities of the country. Unfortunately, we now hurry through this beautiful region without taking any further notice of the land or the people ; for the want of sufficient water-course, and the ignorance of it, drives us to make as much haste as possible to the friendly Elliäbs, where we intend to stop and caulk the vessels. I have never remarked persons lying ill, and diseases may

be generally rare among these people of nature ; when they do come on, perhaps they are mostly fatal. At nine o'clock we are off again, and have, immediately on our right, two little green islands, and a village on the shore. Another entanglement of vessels, so that it is a complete disgrace !

The water, pouring out vigorously from a gohr of the right shore, is muddy, and appears to come from a lake, the water of which is let off for the sake of catching fish. On the left a green island, with high reeds ; on the right a wood, wherein there are several bare and withered trees. The land appears here to be quite uncultivated. Our vessel at last goes again properly, for Selim Capitan, whom the other vessels are trying to keep in sight, outstrips us by the stroke of the oars. The reed-island is followed by another one after some paces. The shores are arid on both sides ; we cannot look over them at the scenery beyond, because the water is considerably lower than when we ascended. In the middle of the river a narrow island, green with reeds, behind which, on the right shore, a large village is remarked, with broad tokuls, as well as herds of cows at the water. These tokuls are open behind, and the young cattle appear to be penned in them. Down at the village another island lies, of about a quarter of an hour in length. On the right and left, scanty wood is developing itself thickly behind the shores. An islet, of three to four paces broad, and twelve to fifteen long, has planted itself here boldly in the river. Either this island is quite new, and will increase in time, or it is the remains of an old one. Immediately behind, an elevated green shield floats again towards us. We navigate

at the right shore to N.E., and shall go again soon to N.

The beauty of the country has unfortunately again descended to the old uniformity, with the horizontal position of the flat country ; before us lies an island like a Delta ; it is already partly dry, and we pass by its left side. But stop ! Every one fetches up, and we shall be obliged perhaps to work over to the right side. Ten o'clock, N. by E. ; we row bravely against the N.E. wind. The shores of the stream are flat and low ; by the sand lying thereon, we see that the river at its side flows over them. An arid island at the left shore is divided by a dry gohr. On the right, a village is suddenly disclosed, with broad tokuls, and negroes expecting treasures. Upon the island, also, they stride stoutly in close to the ships, but no beads are handed to them. The men of the oxen-village point to their herds, but their benevolent offer is in vain.

We remark, as usual, among the light-coloured cows, many quite white, and few black or dapple. The bulls have the customary high and thick hump ; the cows, on the contrary, have exactly the appearance of those at Emmerich on the Rhine ; their horns are twisted in a surprisingly handsome form, and set off with flaky hair, as well as the ears. They carry the latter erect, by which means the head, and the lively eye, acquire a brisk and intelligent expression. We have an island of about a quarter of an hour in length at our right ; the oars rest in consequence of a stronger current, and we go N.E. Half past eleven o'clock. On the left a green island, of the length of half an hour, before which we again get aground,

without our intellectual commanders being disturbed by it. We stop at the right shore, to make our mid-day halt, but Suliman Kashef pushes off again, although he is the man who takes most care about the distribution of the meat, and we others follow amidst the murmurs of the crew.

After we had left on our right two islands, we halt at the foot of the second one, at about three o'clock, with the same intention. The shallow island is only elevated a little above the level of the water, of a sandy nature, but full of a species of large and small grass, conclusive of the splendid pastures of the surrounding country, of which the herds afford the best proof. We navigate further, and have immediately a small island on our right. For amusement we go awhile upon the sand, soon get off again, and have on the left another island with shallow sand-heads at the side. The whole left shore lies flat, and makes its appearance beautifully wooded; over it Mount Nerkanjin, concealed in mist and by the distance, rises to the west. I take leave of it and of all the mountains, which are so delightful to my heart, and have contributed so much to my convalescence by their fresh air, and by bringing before me pictures of home. We go to the north. A poor little hamlet, surrounded and shaded by trees, on the left shore. Right and left the vessels squat, and accident alone makes us take the middle road. At the right, two small islands, distinguished, as usual here, by nothing except their succulent grass or reeds. Yet our vessel, proud at the start already gained, goes smack on the flat left shore, as if Nature did not shew shallows there to the most inexperienced mariner. One shock, and—we stick fast. Once more tokuls

peep through the trees of the left shore at some distance ; negroes are collecting on the shore.

We are navigating through a tract of countries, touching whose original formation and populations we exhaust ourselves in fruitless conjectures. Monuments do not tell us, history is silent, and the annals of the people live only in meagre traditions, which may possibly extend to two or three generations. We could not learn any thing even of these, and the past is repeated in a perpetual present. We throw a sorrowful glance at the youth of these nations, and do not understand how it happens that a people could always remain *young*.

The other vessels pass us, whilst we are calling, "Eh lissa !" Most of the men are only seemingly exerting themselves in the water, to hoist the vessel, without answering the Abu Hashis passing by and mocking at us. The natives must love the shade, for they remain with their wives under the trees. The shaven heads, and mostly turned in noses of the latter seem to do homage to the principle of beauty being in man. If this decided type of the feminine formation of countenance afford the plastic proof of the primitive natural distinction of the sexes, then not woman, but man, stands here as the master-piece of Nature, similar to what is generally the case in the animal creation. Woman is the weaker being in such a state of nature as this,—the beast of burden, in whom the germ for the improvement of the character is suppressed, though it must be considered as her inalienable birthright.

After a quarter of an hour, we work ourselves off, and row, as fast as our bodies, dripping with perspi-

ration, will allow us, in order to gain a deeper water-course. On the left we notice a forest-hamlet, and on the right an island, which is a quarter of an hour in length. Another island ends, the upper part of which I had not remarked. A long bright water-basin, from the back ground of which two little islands, like green hills, cheerfully look up, stretches before us in N.N.E. The negroes dance and jump no more; they stand melancholy on the shore, because they lose their glass-bead men.

Half-past three o'clock. After the lapse of some minutes we navigate through a narrow canal, and leave the broad water on our right behind the island close to us. At the end of this island we first drive furiously against the shore, and then against another vessel, so that there is cracking and breaking aloft, and a flood of curses discharged. The men jump into the water, bawl, and make a row on all sides, to push the vessels off the sand. We get loose, have an island immediately before us, and try to go into the narrow arm, which separates it from the right shore. The island is covered over and over with luxuriant creeping beans, and is half an hour long. Some of the vessels try their luck on the other side of the island. A number of goats and sheep are pasturing there, and among the latter, rams with horns twisted back, and manes. We keep the main direction of the river, N.N.E., but there is neither direction nor order among the vessels, "Allah kerim!"

A beautiful verdant island below seems to wish to block up our road. Suddenly a second island appears at our side, separated from the former one by only fifty paces of water. We stop at it, because most

of the vessels have taken the deceptive broad path, and got upon the sand. The current is strong here, and amounts to two miles. Although our men are at home on the Nile, yet they have no idea at all that where there are precipitous broken shores, and where the shoot of the water falls, there, on the average, the greater depth is to be found.

Suliman Kashef's beautiful slave has hitherto not yet come out of her narrow back cabin, often as I have begged him to let her. O thou land of the East and jealousy! An unexpected emancipation of the eastern wives and maidens would give an extremely surprising result, judging from analogy with all the circumstances occurring in the *hárims*, notwithstanding the trifling grade of cultivation, in which these beautiful domestic animals stand, and their quaint notions of the *honestum atque decorum*.

Four o'clock.—The last island, where we stopped only a short time, and repaired in some measure our broken helm, is immediately followed by two islands, lying close to one another, the nearest of which extends a long way. It is covered with much larger tobacco plantations than we have been accustomed hitherto to see. A hedge defends it against the beasts of the water, and over the young plants reed-roofs have been placed to protect them against the heat of the sun. But what we had not hitherto seen, is a little watchhouse raised on stakes, from which the field-guard peeps out;—a police establishment, which might be placed here more on account of human beings than of beasts.

We leave those islands, as well as the two small reed-islands previously named, together with the

broad water at the left, for another island of an hour in length joins on to the latter one, and promises a deeper water-course. The steeply broken shores of these islands, like those of the right side of the river, are stratified in horizontal layers, which consist of mould, sand, and a reddish-coloured substratum of iron-ochre. We go here with the right shore to E. A broad gohr comes into the river from the right side: therefore, what I just now called a right shore, is taken for a large island, the head of which, however, no one pretends to have seen. At last, we again advance, although not for any length of time, in a bed of the stream destitute of islands, and from pure magnanimity we order the oars to rest, so as not to stave in the ribs of another vessel. On the right, a village and some scattered tokuls under the trees. We make a bend to N.N.E. The right shore is thickly covered with trees, but there appears to be little shade there except under the solitary trees having broad boughs. On the left shore are seen, on the contrary, few trees, and the real forest may be further up the country.

Six villages are observed from the deck on the right, and three villages on the left shore. Before us, to N.E., rises a small mountain, to which we perhaps shall approach still closer, for it was not remarked previously in our ascent. On the shore, we have right and left a village; at the left side two more villages immediately follow. From the deck we see here seven other villages; to the right, in the forest, a large village, and closer to us a small one on the shore, whilst on the left again, other tokul-tops peep forth beyond the shore. Solitary huts are

scattered on all sides, and the country seems to be extraordinarily populous. Nevertheless, we remark very few people; the others may be employed somewhere in the interior harvesting, catching fish, or elephant-hunting; or state affairs, perhaps, keep them back.

Five o'clock.—To N. On the left a little hamlet, with tokul-roofs, which stand on short stakes, and may be used perhaps only for the cattle during the rainy season. The small tokuls raised on stakes serve partly as sleeping-places, partly as store-houses; these are seen in every village on the White River. Half-past five o'clock. At the left we see the end of an island, which must be very large, for it goes up, at least, to the last-named island, and may run behind it to the left shore. On the left there are three villages, but the trees have entirely disappeared. On the right five villages, and then a large and small island; behind them a sixth village. The river makes a beautiful bend at this place from N.N.E. to N. Splendid large shady trees stand out like giants over the other part of the forest, and from deck we perceive a hamlet under them, and also two villages at some distance from the left shore. The Haba, properly speaking, displays itself here of a blue colour in the distance, extending from W. to N., whither we let ourselves be drifted also by the tranquil river.

A large herd of cows comes down to drink at the stream, but we pass proudly by, and the Arabian children do not murmur because they are going to their dear home.

The report that the nations below had blocked up

the river to cut off our retreat, having turned out unfounded, may likewise have contributed to this unusual contentment. I remarked evidently how glad they were that no crowds of natives were collected at the numerous villages, near which we were so often beneaped. On the right, the end of an island displays itself; this, at all events, therefore extends behind the upper island of the right shore. Over two little islands we see, on the right side, the tops of several tokuls. At sunset we go from N.N.W., in another bend to E. A long water-line spreads before us, whilst the river bends to right and left; we accommodate ourselves again slowly to rowing.

Half-past six o'clock. At both sides two long islands end, their commencement having been concealed from us by others. Near the pastoral village, on the left side, we hear the cattle and sheep returning home, and see the smoke widely extended, as a protection against the gnats, for their nightly rest. That is much too inviting! Near a small green island, in the centre of the stream, which spreads here majestically like a lake, we cast anchor, and the vessel turns its bow towards the west, to Mount Nerkanjin, the outlines of which stand out only faintly from the darkening sky. It is a lovely evening.

CHAPTER V.

RIVER BUFFALOES.—COMICAL APPEARANCE OF THE NATIVES.—WILLOWS.
 —SPECIES OF STRAND-SNIPES.—MODESTY OF THE WOMEN, AND THEIR
 APRONS.—THE LIÈNNÉ.—ORNAMENTS OF THIS TRIBE: THEIR TOKULS.
 —THE SERIBA OR ENCLOSURE TO THE HUTS.—ENORMOUS ELEPHANT'S
 TOOTH.—LUXURIANCE OF THE SOIL.—THE COUNTRY OF BAMBER.—
 DESCRIPTION OF THE NATIVES.—MANNER OF CATCHING ELEPHANTS.—
 ROYAL CRANES.—SPLENDID BARTER.—TRIBE OF THE BUKOS.—
 STOICISM OF AN OLD NATIVE.—SLAVES.—HIPPOPOTAMI AND CROCO-
 DILES.—THE TSHIÈRRS.—THE ELLIÀBS AND BÒHRS.—DESCRIPTION
 OF THE FORMER TRIBE: THEIR WAR-DANCE.

31st JANUARY.—Before sunrise we set out, and had 20° Reaumur; yesterday and the day before, 19°. We had scarcely advanced three paces, when we stuck fast on the sand, because the crew wanted to let themselves be drifted at their ease. We therefore row out of the lake-like bay to N.N.E. Men and women stand smoking on the shore, and offer their pipes and other effects, but all their signs and calling are in vain, and the fear is general that the river may be too shallow. The stream issues broadly from the left side behind an island, to which a smaller one joins itself. Eight hippopotami are enjoying themselves in the space between the two islands. Their enormous heads have the closest similarity, at some distance, to those of buffaloes, only they are larger, and have no horns, and therefore the Arabic expression *Gamùss el Bah'r* (river buffalo) appears more suitable

than that of hippopotamus. The name of G'zint is little used here, although it may be the ancient indigenous one.

Whilst we are going at half-past six o'clock, N.N.W., we observe on the right, also, a Nile arm to N.E. On the left a summer village, and sleeping places, with reed walls, and small tokuls, running quite to a point, and funnel-shaped, with plastered walls. On the right, two hamlets, and on the left a reed islet; before it a broad arm enters the land to W., and seems to form a large island, for we go here N. by E. The stream, which had narrowed previously to four hundred paces, loses little of its breadth by these means. Before us floats again a green little reed-island; we leave it at our right. The forest has again retreated, and on the left, also, there is nothing seen above the ground, except here and there the top of a tree. The shores are arid, and very refreshing is the large tree on the right, with its horizontally twisted boughs, like an isolated gigantic oak, behind which the house-tops of a large village peep forth.

A number of ash-grey men set themselves to race us on the right shore from a little village; they fife, sing, and clap their hands, dance and jump, especially the young ones. On the left also the flat sand-shore is covered with ash-grey people. The song on both shores is kept up in the very same tune and time, which they alternate by strophes. There are hardly any weapons and ornaments to be seen on these men. Cleanliness, the red colour of the skin, and luxury, seem to disappear with the neighbourhood of the Sultan's palace.

Half-past seven o'clock. N.N.W. We have a beautiful river-path before us, winding towards N. Eight o'clock. An island at the left shore, the land arm of which is mostly dry. We circumnavigate this with the river, N.E. to N.N.W. When we came near to the natives, we found that they had tried the water a little; now, therefore, they dance and jump in long shining black boots and breeches, and grey close jerkins. Such was their appearance, and one really could not help laughing. Tokul-tops and a hamlet on the right shore; on the left a small island.

Half-past eight o'clock. At the left side the beginning and end of two islands, with a beautiful margin of reeds, and blooming creepers. We go N.W.; a broad arm of the Nile in the right shore to N. by E.; a large lake far towards the trees to S.E., and another one equally large and distant, to the right of the Nile-arm to E. The lakes are only visible from the masts. Behind an island on the left, a cattle village, with numerous herds.

Nine o'clock. From N. to N.W. A large crowd of women are singing, clapping their hands, jumping and shouting a bacchanalian huzza, as if they would make our acquaintance with might and main. A splendid shady group of trees, and a large tokul village, wherein they now may play the master, is in their vicinity. We land at the foot of the last-named island. I repair to Selim Capitan, to gather information through the Tershomàn.

Ten o'clock. N. by E. On the left a broad gohr swerves to W., and is said to issue again among the Elliàbs. I remarked on the shore a kind of

willow I had never yet seen, which is altogether similar to our Rhine willows. The reïs hugged the shore, to please me, but even the last copse slipped through my fingers, without my being able to cut off a branch. The forest of the right shore promises not only variety from a distance, but also cooling shade.

Half-past ten o'clock. The river flows N.E.; on the right is a large village, near which we wind N.W.; then soon N. N.W.

On the right, herds and huzzaing, and singing negroes. The south-east wind freshens a little, just as we go N. W.; but we dare not sail, on account of the numerous shallows: and for that reason also, the mainmasts of all the larger vessels were taken down at the commencement of our return voyage. In calm weather the sails were spread over these masts, laid horizontally to protect the crew from the sun. Selim Capitan knows what the men are able to endure, and therefore commands repeatedly "Alma!" (rest); connecting it, perhaps, with calm; whereupon the rowers discontinue their labour. "Alma" means, besides, in the Aggem language in Taka, "water;" as also among the Bishari and Shukuriës. We go N.E., and then N., and round a green reed-island to S.W., but soon again to N. On the left shore, a part of the new Haba suddenly discloses itself; we go a short tract E.N.E., and at half-past eleven o'clock to N. The head and foot of two islands, one close behind the other, are at the right side. I see again the first *Zigzag* and *Sammi*, two species of strand-snipes. The latter are called by the Franks Dominicans; in Mahass and Dongola, Begha and Kegla. They make the sportsman very angry, because they

announce danger to the other feathered tribe by their loud outcry.

Twelve o'clock. N.E. by E. On the left an island, and soon afterwards, when we are navigating N.N.E., another on the right; and some tokuls, with dancing women, on the shore of the downs. We stick fast on the dry ground for a quarter of an hour, and have, at half-past twelve o'clock, two islands on the left, close to one another, with the usual green border of reeds. This side rises like a hill, in the manner of downs, even to between the trees. We only see the end of these islands. Water fixes here animal life, and human population may spread far away from the main stream, generally on the White River, which may be considered as shoreless. We go round a sand-head of the right shore from N.E. to E., and at a quarter before one o'clock to S. On the right an island, and on the shore a village; on the left several people. With a short bend we have come to the N.; go, at half-past one o'clock, to E., and immediately left to N.E. At two o'clock E., and at half-past two N. A sand-bank here protrudes itself half into the river from the left shore. A summer village, with a large tree, stands behind.

On the sand-bank some pretty young girls had collected, and a number of poor Ethiopians, highly delighted at our arrival. They sing, throw themselves on their knees, spring up again in the air, and stretch their hands imploringly towards us. Selim Capitan is easily persuaded to stop a short time, and to distribute some of the usual glass beads. The unaproned damsels, who could entreat in so friendly a manner, and point to their neck and wrists, ran, how-

ever, away immediately, when we wanted to give into their own hands some strings with glass beads. There appears to me to be no doubt that there is a certain separation of the sexes ; for these girls, part of whom were marriageable, kept aloof at some distance from the men : this also, shortly before, was the case with the married women. The latter appeared here and there together with the men ; but there were always very few of them, and it might therefore be considered the exception to the general rule. Opposite to the sand-bank an arm of the Nile enters E.N.E. far into the land of the right side of the river. We row to N., but soon to E., N.E., and N.

Three o'clock. We leave, about N.W., the broader river separated from us by two islands lying close to one another, and have on the right the large island, or island-land, near which the arm of the Nile enters in an easterly direction. We follow this arm N.E. and N., and the island, at its entrance, has immediately an end here. A summer pastoral village is at the right on the shore of this large so-called gohr. A quarter after three o'clock. Again from N.E. to N. Several women stand on the right shore near a simsim-field ; they wear behind them a large piece of leather, like a miner's apron, which may serve them, when they sit down, as a cushion. The rahàt in front of them is not larger than a hand. Their shrill cry of exultation sounds almost the same as that of the women of Khartùm and Kàhira. At half past three o'clock, on the right two farm-yards, surrounded regularly in the square with palisadoes ; beautiful verdant young trees are standing by them. The forest seems to have vanished on all sides. From

N. we come gradually to N.E., and go now N.W., where the river makes a splendid bend to the N. A village lies a little up the country on the right side, and an island ends by it.

Everywhere we notice watchhouses among the produce of the fields or tobacco-plants. They consist of four stakes, with a scaffold, and over it a flat straw roof clogged with earth, such as is seen also in the land of Sudàn. If these little watchhouses are not erected against thieves or beasts,—the former I believe to be the case on account of the abominable suspicion of the people in barter,—they may be a shelter for the labourers when carrying on the irrigation. The black gentlemen had bent reeds, which had grown crooked, for their tobacco-pipes. In order to express their joy, they jump like goats, with closed legs, swinging at the same time their arms. When old men singly try these leaps, as I saw done previously by a sheikh of the Ababdes, when we called him an old man (aguhs), it looks extremely ridiculous; but it is abominable and disgusting when old women, with their flabby breasts flying up and down, make such jumps of joy. A very narrow canal leads either to a lake or low ground, or it may form a tributary arm and an island at the right.

The water here is still as clear and well-tasted as above near the mountains: sand has much to do with this. We do not remark, either, any stagnant water, standing in connexion with the stream, as further downwards. The thermometer has got up to 30°. Four o'clock, E.N.E. Several singing negroes on the right shore. Immediately N.N.E., a quarter of an hour later N. and N.W., but soon in a short

bend to N.N.E. The river is about two hundred paces broad. Half past four o'clock. From N.N.E. to —, we bring up first,—N.E. by E. for a short tract; with a short bend after a quarter of an hour N.W. A powerful Nile buffalo, looked upon with astonishment, even by the sailors themselves, being a gigantic animal, plays before us in the water, and induces the two engineers to leave for a moment their cloister system; usually they have their windows hung with curtains, and never let themselves be seen at all outside the door. Five o'clock. From N.W. to N.E., where a beautiful water-road extends before us, closed below by a green island. On the right a broad Nile-arm comes from S.E., and discharges itself to S.; it seems, therefore, to encircle a large and broad island. A number of people have collected there. The river is quite calm, unmoved by a breath of air; no oar is striking its polished surface: we sail with unruffled temper, protected against the rays of the sun, under the covering of the denda (ship's tent, perhaps from the Italian *tenda*). A surprising swarm of black-coloured people accompanies us along the shore. We see how they wonder at our vessels, without comprehending how such a mighty machine could have originated from a sürtuk, or hewn-out trunk of a tree. The invention of their ancestors has remained here in its natural first foundation, for their necessities give no impulse to the improvement of these boats, which may have been even in use, in this part of Africa, before they were on the Rhine, the Danube, and the Thames.

The nation of the Liènns is already in possession of this country. The Liènns have the same language as

the inhabitants of Bari ; but they know also that of the Dinka nation, or the dialect of the Dinkas, which alters down the river, if such deviations have not been carried down with the features of the people. They stand in friendly relations with Bari, and do not pay tribute to King Làkono, as I heard plainly from Selim Capitan's interpreter. Notwithstanding that their forehead is covered with points in horizontal lines, they seem to be of the same origin as the tribes of Bari. The Tershomàn Gùmberi, who gave himself out previously for a Tshièrr, pretends here suddenly to be a Liènn, and wants to go ashore with his treasures. He had accompanied us through the country of Bari, and appeared also to be known there. It seems to me that he has commercial speculations in his head, and fears that we might take from him again his beads. We induce him, however, to remain still with us, because he is very clever in his way. Half past five o'clock. On the right a village, with good tokuls, and the green island long seen by us. A city called Djàr follows soon after. Another island ends before the village, separated from it by a narrow gohr. A third village lies further down the river ; to the left shore an island with a green head, near which we stop at sunset, for we see on the shore a large herd of cattle.

1st February.—It was with difficulty that I purchased a national bracelet of ivory, for these ornaments are as if grown to the people. Such bracelets are light, two to three fingers broad, and fluted, these stripes being coloured black. Small tortoise-shells are worn very commonly here, as in Bari, on the neck or arm. At eight o'clock we leave the

island, go N. by E., and see upon it several scattered farm-yards with cultivation.

An island of three-quarters of an hour long was at our right. The east wind is tolerably brisk: we soon take to our oars, and I imagine we make in this manner three sea-miles in the hour. This pace stands as the rule with Selim Capitan, when the wind is not contrary. Before us we perceive a forest, which extends over the horizon on the left shore. The latter is planted far and wide with lubien, or small white and variegated beans; so is also the small island of a quarter of an hour in length, lying at our right. Nine o'clock. From E. by N., to N.E., and N. by E. On the left side of the river, where we remark a village up the country, an arm of the Nile goes N.N.W., and forms a reed-island.

Owing to the laziness of the sailors, the east wind drives us into this canal on the sand, from which we get off again at half-past nine o'clock; a small island, with a border of green creeping flowers, is at our right. A large village is seen on the left, with large and small well-covered tokuls. On the large ones the roof reaches nearly to the ground, and rests upon stakes; behind this circular portico, we see the plastered walls of the habitation properly speaking. The small tokuls have higher walls, but not this lengthening of the roof, supported on stakes, and which we saw also in Bari. Behind the small flower island, a city or large village rises on the right shore.

We go N. by E., and remark on the left side two other large villages quite in the neighbourhood of the preceding one. The forest of the right shore has again approached; a small green vegetable island

being separated from it by a narrow arm ; some hundreds of paces further another small island, which, besides scanty reeds, is thickly covered at the upper end with vegetables of various kinds, whilst species of couch-grass and creeping water-plants are floating round by the shores. Beyond it we see three villages lying on the margin of the river, really romantically, before and between the trees. On the left shore two neat farmyards shew themselves in a shining seriba of reeds, the stalks of which are connected very regularly with each other, but perhaps only afford resistance to tame animals. All these villages were surrounded, however, with a stronger enclosure of thorn-like shrubs, as a defence against wild beasts and naked men. A large thorn-bush supplies the place of a door, and cannot well be seized and pulled out from the outside, as it is drawn and squeezed into the door posts with its lower end. Such a seriba is common in the whole land of Sudàn ; the before-mentioned reed-walls are likewise very general, and attract immediately the curious eye. The tokuls have, in part, a roof protruding in the middle with a wavy form, like also some previously seen, but the latter had low walls. A number of negroes have collected, without weapons or ornaments, and shining black, for they have passed through water.

Half-past 10 o'clock, N.N.W. In the middle of the river an island a quarter of an hour in length, covered with lubiën. A city with tokuls packed close together on the right shore, a village being opposite. Another large village is united to the city, which reaches over the island ; its tokuls are mostly

surrounded with reed-walls, and probably the women are shut up in them. A beautiful tree with wide-spreading branches rises between these two cities, and may serve them for their place of meeting.

Eleven o'clock, N. We leave to our left an island of an hour in length, elevated only three feet above water-mark, covered at its head with reeds, vegetables, durra, and lubiën. The shores are planted right and left. We stuck nearly fast by the large city ; and now we have the *trinchetta* or foressail as leader, so that we may navigate on the sand more splendidly. The forest emerges on the left shore, and solitary beautiful trees stand on the margin of the river, between which an island grown over with reeds, of a quarter of an hour in length, is situated. In the space of ten minutes another one follows. The vessels halt at the shore to wait for Selim Capitan and the other vessels navigating on the sand. We lie to at the left shore, and the order to wash the vessels is also complied with by us.

Fadl and Sale had already gone from the ship on a hunting excursion, though I had no idea that they would do so while the vessels were advancing. I looked about anxiously from the deck, when a sailor shouted to me from the mast that he saw them at a distance. It was not long before I heard them shooting, and they came to the right shore with a large elephant's tooth on their shoulders. I had them fetched off in the sandal, and then found the length of this tooth to be eight feet and a half. It was unfortunately a little decayed, but yet one of the largest we had on the vessels, for the larger ones were generally from seven to seven feet and a half long. It had served also

as a stake to tie oxen to, and was purchased for a few large glass beads.

We set out at half-past two o'clock, but the east wind drives us back to the left shore. The land here is principally cultivated with simsim and lubëin. Watchhouses, scarecrows, old baskets, and skins stuck upon poles, are paraded about in the fields. Everything is standing green and beautiful. It is impossible that the natives can water these large fields by hand, as I saw by the small tobacco plantations. In vain, however, I looked about for regular irrigation canals, by which they conducted the water from the river to gush over the land, in the manner usual in Egypt and Nubia, from the simplest contrivances up to the chain of buckets drawn by oxen; for water-wheels or saghiën cease with the Arab tribes on the White Stream. The clayey fruitful soil must therefore be able to retain, for a long time, the moisture remaining after the inundation, and the strong nocturnal deposits may preserve the fruits fresh; the more so, because the sun, owing to the abundance of thick plants, cannot scorch the ground.

The creeping beans seem to have the power especially of attracting to themselves atmospheric moisture; I saw them often, on quite arid soil, where everything else was already dried up, spreading from one root up to twenty paces distant in the most luxuriant dark green foliage. It was only with caution that one dare raise these long tendrils, to seek the slender long pods, for animals liking moisture—such as snakes and loathsome reptiles—take up their abode under them. Soon we push off again from the shore and go to N.N.E. On the left an island, which is culti-

vated towards its lower end, whilst the reeds are wisely allowed to stand at the upper end, on account of the pressure of water. Near the pastoral village in the neighbourhood a large tree rises. Our men believe that veneration is paid to trees standing isolated. Another small island, covered with grass and reeds, obeys still the element from which it rose.

The shores of the river are generally green, and enjoy the cultivation of the human hand. The land extends flat on the right, encircled by the Habas: four villages lie in it, and the village on the shore is really large. On the left, a small and pretty river-meadow with a tokul and watchhouses; we make a strong bend to N.N.W., and here ends on the left the former island, above half an hour in length. A fifth village joins the four others; the solitary farm-houses are surrounded with hedges of light reeds, as also the farm-yards, wherein a few tokuls lie together. The latter, perhaps, as generally in the land of Sudàn, harbour an increasing family, and increase with it till they become a large settlement, where the head of the family has the precedence according to the rights of primogeniture; this we find also in King Làkono's dominions. Though harvest has taken place on the right shore, we see on the left nothing but green cultivation.

Three o'clock. We land below this Ethiopian pentapolis on the right shore. Here, therefore, the bairàm-el-kebir will be probably solemnised. Unfortunately I do not see a tree under the shade of which I could seat myself, but interesting purchases of the national curiosities may be made. My speculation

in elephants'-teeth is considerable, and a kind of mercantile rage comes over me for the first time in my life, when I think how I shall surprise my dear brother in Khartùm, as we are drinking the first glass of wine together in the divàn, and my three faithful Baràbras, covered with the weapons and ornaments of the people of these countries, march in through the bye-door and lay the whole booty at our feet. We are here in the country of Bamber, and the large village city bears the name of Berize. Here Gùm-beri, our interpreter, is really at home: I see how his relations shake hands with him and press him in their arms. His countrymen have generally, but not always, these single tattooed prominences or points upon the forehead, which reach in six or eight lines crossways to the temples. The natives are, on the average, of considerable height, although we find among them men of moderate size, but they are destitute of the muscular structure of limbs of the highlanders, and are much more slimly built: the formation of the face and the language is, however, similar to those above. They are dirty, and may be called *poor*, in respect to their ornaments and weapons, compared with the people of the highlands of Bari. The ivory bracelets we find dearer here than anywhere else; the interpreter, who has left on board the greatest part of his beads for temporary safe-keeping, may have enlightened them on the value of our ornaments, in order to remain the safer in possession of his own treasures.

They produce their iron weapons from Bari, and seem not to wish to sell them at all. This deserves all praise, and shews that they reflect; for being a

small nation they ought always to be ready for combat. The forest behind the wide-extended durra-stubble consists of melancholy ge'ilid trees on dry and sandy soil. The men bring wood, every one a little log : a couple of small beads are given to each. They are contented, like children ; but they manage to steal our purchased wood and sell it to us a second time. My servants tell me that they have found a deep pit covered at the top lightly with straw, in which elephants are caught. A barking dog was fastened to a corner of it. The latter is a huntsman's whistle to entice the elephants who may chance to be curious. This manner of catching elephants is common throughout all the land of Sudân, especially in Fàzogl. We were not a little afraid formerly in Taka of falling, during our nocturnal marches, with our horses, into these elephant-pits, as frequently happens in the Chasnas. In truth the people in Taka seem to stand on friendly terms with elephants, and to leave the hunting of them to the mountain people of that country, although Sauachinn (Sauakim) on the Red Sea is the staple town of ivory, from whence it goes to India, and afterwards to Europe.

2nd of February.—To-day is the great Bairam feast. The rising sun is greeted with twenty-one cannon-shots : all the people run away, and do not return till after all the guns had been discharged. I learned from Feizulla Capitan the formula of the usual congratulation : "Bairam Sheriff ma' berèk," and set off with it to the two commanders. The Egyptians could not belie, on this opportunity, their innate Bakshish mania, and came one after the other for drink-money.

Arnaud is so ill that he cannot leave his vessel, and raves incessantly. With the exception of some small elephants' teeth, I only acquire, notwithstanding Fadl's activity, a few ivory bracelets and iron buckles, with an oblong plate. Although Selim Capitan yesterday, at the request of Gùmberi, who petitioned for his countrymen, distributed some cups, with the usual sug-sug, among the people, and also presented strings of beads to certain individuals, yet they only brought us to-day, at last, *one* ox. Gùmberi seemed not to possess the proper influence with his friends, and, moreover, to have excited the envy of a chief; for he had only fetched away, at night, from Selim Capitan, his glass treasures, under the promise of several paschal lambs. We set out at half-past eleven o'clock at noon from Berize, and leave on the right a reed-island, of the length of half an hour, the lower part of which is covered with lubiën. N.W. by W. Both shores are cultivated. At one o'clock a large village on the right; opposite, another one, with open tokuls, and a strong palisado-kind of enclosure, seemingly as a protection against wild beasts, if not against men themselves; for this is a station of herds. N.E. by N., and a quarter after one o'clock to N. Near the large village three others are in a line, on the right side of the river, the last numbering about a hundred and fifty tokuls. The walls of the magazines, being raised on stakes, are wattled like baskets, and then besmeared with clay; the tokuls for the cattle, which also stand separately here, are protected by a strong seriba of trunks of trees and thorns; whilst around the habitations of human beings there are hedges of reeds, partly smooth. Opposite,

at a little distance from the left shore, another village. To judge from the shores, beans here appear to afford a principal means of nourishment. Half-past one o'clock. From N.N.E. to W. by N., and then N.N.W. Solitary tokuls, near which the beans occupy entire plains. From N.N.W. immediately again W. Some hundreds of royal cranes perched here quite gorgeously on a sand-bank; they were right not to keep their position, for I had raised the "longue carabine," as my brother used to call our long Turkish gun. A quarter before two o'clock, N.W. From the deck we see four villages to the right, and one to the left.

Before us we have the obtuse corner of an island, which has from here considerable extension. Large herds of cows and villages are scattered upon it. Away over the end of this island we see, on the right side of the river, three more villages. In consequence of the shallows, we leave the right arm of the Nile and make for the left shore before the broad island, going again a-back. Close to the nearest village, on the large island, a number of blacks have collected.

The leader of the chorus leads the choir, and the multitude answers with fearful vigour. A troop of *élites*, assembled before the crowd, run in close column backwards and forwards,—their leader at their head, commanding them, and holding a pole, on the top of which an animal's tail was fastened, clearly in order to give us a warlike representation. But they bring several heads of cattle to the shore. These are reasonable men: we have, in truth, no meat, and the sailors crack the rough lubiën-pods and the durra-stalks like sugar-canes. Real garden warblers

are these Arabs, and all the blacks. Selim Capitan has already reached the island, whilst we remain fixed on the sand until I wake up the captain. I hear the sailors gasping forth "eh lissa," but I know this simulating of extreme exertion, when each man trusts to the other one working. At half-past two o'clock we pushed on through the left arm of the Nile over to the island, where there was a great huzzaing and joy on the vessels touching land. Again they brought three oxen, and a splendid barter took place. Besides fowls, goats, and sheep, they bring a quantity of elephants' teeth, panthers', leopards' and monkeys' skins, little stools, iron buckles, ivory bracelets, weapons, lubiën, small water-melons, woollen war-caps, iron necklaces, strings twisted together of little shining black fruits, fixed like beads, &c. The people are very friendly, and willing to oblige, and I might say, more cultivated than those of Bari. We are on the large island called after the name of the neighbouring great village Buko. The latter contains more than five hundred tokuls. I hear, to my astonishment, that the nation here is not called Bamber, but Buko, and that the tribe of the Bambers has its boundaries before this island, and is only a small race, like the Korreji, or Korreschi, who are said to dwell above the Bambers, and may have originated from Mount Korreji in Barì. It seems that these Bukos are of one race with the Bambers, Tshiërres, and Liënns, for they have generally their foreheads dotted. The formation of the face, and other physical qualities—the large and moderate stature, also speak

in favour of a common origin and subsequent separation.

The arm of the Nile wherein we lie, and which we shall navigate, is called Kirboli; the right and narrow arm on the other side of the island, towards N., Kirti. Selim Capitan requests me to accompany him to the Kirti. We went down it in the sandal for the distance of half an hour, and found its breadth to be seventy-five mètres, by the assistance of the rope which was drawn across it through one of the plundered sùrtuks. As far as we can see, this arm goes, with slight declinations to E. and W., entirely to N., which direction the natives also gave. According to this it would be our nearest road, but its water is unknown, and it is not thought safe to let the lighter vessels take this short cut.

With respect to this little track, it had a depth, at the commencement, of two, immediately afterwards of two and a half, and, at the end of our excursion, of three and a quarter fathoms. We returned about evening by land,—painful enough for Sabatier and myself, who are just convalescent,—and passed by nine small villages, or groups of tokuls, which I had taken, at our anchorage, for three villages, and then had counted thirteen. The surface of the earth is an excellent humus on this side, and the little fields were trenched with furrows for irrigation, and on which, among other things, we found water-melons. On the extensive plain of the island we do not observe a tree, except some small ones, near our vessels, and a large one behind the city of Buko. From a distance we saw the natives harpooning fish, which they brought

soon for sale to us. But here, also, we found, in general, an intolerable and abominable mistrust.

3rd February.—The natives have generally few ornaments, weapons, and other effects; and little, therefore, could I acquire in this respect. Yet I did a good business in ivory, and I please myself at the idea of how you, my dear brother, will stare, though far,—far are we yet asunder.

An old man, having two thick ivory rings, of a hand's breadth, on the upper part of each arm, and leathern strings round his neck, will have nothing to do with selling or the new glass trade. He regards the glass beads with a certain air of contempt,—won't have them, even gratis, and looks disdainfully at the childish passion of his nation. I see him now from the vessel, quietly sitting under a little tree, and smoking his pipe, without troubling himself to come nearer to us. He smoked, as is frequently seen on the White Stream, *charcoal*, from want of tobacco—called here also *tabak*—a thing which none of us could imitate. When I gave him tobacco, he became at once quite friendly, knocked the charcoal out of his pipe, filled it, took down the little tongs, to which there was a shovel attached, from the pipe-tube, and laid a coal upon it.

Unfortunately, what we had been already told in Bari about the traffic in slaves, was confirmed here. Las Casas,* who effected the freedom of the Indians,

* Bartholomew de las Casas, a Spanish prelate, born at Seville in 1474, and died at Madrid 1566. He set at liberty the Indians who had fallen to his share in the division of Cuba, when it was conquered by Columbus, and interested himself for them with King Ferdinand. With a strange inconsistency, however,

transplanted therefore an abuse only from one quarter of the globe to the other, without considering its results. In the mutual wars here, the prisoners, like those of the Greeks, Romans, and ancient Germans, are made slaves. Yet, perhaps, among these people they are redeemed by paying a certain number of cattle. Men-hunts, properly speaking, do not seem to take place, and their wars consist only in the reciprocal plunder of herds, and the revenge thereby occasioned, when they may seize on human beings as an equivalent for their pillaged property.

Cattle are here of considerable value, and this may arise from the great population, which therefore does not despise meat. A slave costs *an ox*, or *six iron bracelets*, which are not thicker than a little finger. It is Sultan Lākono who takes their slaves from them, giving iron in return; and as in the land of Sudān, golden okiën serve instead of coined money, so here rings are used for the same purpose. It may be also a kind of policy in this king paying only in rings, and not in weapons, by the possession of which his neighbours might become dangerous to him. Lākono comes to this place every year, with several large sürtuks, and winds up this business in person. He requires these slaves for labour (those seen by us seemed quite contented with their lot)—to get the iron and work it, and also perhaps for his protection. The despots of Sennaar also keep up their dignity by slaves, and not by a body-guard of

he became the author of the slave trade, by his proposal to purchase negroes from the Portuguese in Africa to supply the planters with labourers, which suggestion was unfortunately adopted.—(Translator).

women, any more than Sultan Làkono. The Turks profited by this cheap opportunity to buy slaves, and Suliman Kashef, who on the former expedition brought fifteen slaves to Khartùm, and sold them as soldiers, is said to have taken this morning several on board his vessel. I am unable alone to oppose this want of discipline. Even M. Arnaud, who pretended previously to oppose with me any purchase of slaves, has been found very willing to take on board a young native girl, who, however, is said to belong to the woman-hating Selim Capitan, as a plaything for his little slave, or for himself, which makes the invalid Sabatier perfectly furious.

Half-past eleven o'clock. We leave the island, and go at first S.W. by S., and then proceed N.N.W. on the Kirboli (Bah'r el abiat). On the right we have immediately the large village of Buko, which turns longitudinally from the shore. The tree standing there is taken not only by me, but also by the Egyptians, for a *sycamore*. Three villages follow on the shore of the island; the last also is not a small one. For a moment we are beneaped, and get ourselves in motion by rowing against the north-east wind, which is looming. The latter village becomes still larger, and is connected with several others; from which, at twelve o'clock, a small hamlet is separated by an interval of space. The pointed roofs, which are frequently so shelving, of the little tokuls, and which I at first could not explain, are nothing but the movable coverings of the wattled magazines. We wind S.W. by W. On the right a large and small village, W.N.W. and N. The arm of the Nile here is not more than a hundred and fifty paces

broad. Half-past twelve o'clock N.W. and W. by E. Three villages on the right, and on the left, from the deck, a distant Haba. Not far from the shore, another village on the island. One o'clock.—We go to E.N.E., and wind to the left W. by N. The island continues cultivated, and we perceive again a hamlet upon it. Half-past one o'clock.—From W. by N., to N.E. by N., and a short tract N.N.W. We halt at this place to wait for Selim Capitan. After a quarter of an hour we set out again, and go from W.N.W. to N.N.E.

Several purchases were made, and there is eternal strife, robbery, and theft of beads, among the crew. I see there will be murder and homicide; for every one now wants spears and ebony clubs, as well as strings of ostrich-egg aglets. It is fortunate that the ivory is claimed by the government, and private purchase of it forbidden. We observe here also some of those gigantic ant-hills, which are so common on the low ground down the river. From the deck we remark two villages on the left side, before the forest, which is half an hour distant.

Two o'clock. N., and immediately W. by N. A large village upon the island is seen from the deck at a little distance from the right shore. Half-past two o'clock. At the right a broad arm of the Nile, going to N.W., and forming a small island. We leave it to the right, and go W. by N. and N. to N.N.E.; then round a sand-head again, S.W. by W. The shores are mostly precipitously broken off; layers of humus, sand, and earth impregnated with iron oxyde, which forms here also the substratum. A quarter before three o'clock. Round a sand-bank of the right

shore for five minutes, N.N.E., then N.W. for an equally short time, and to N. by W. The shores here are covered, for the most part, with green reeds.

Three o'clock. The thermometer rose this morning, up to noon, from 20° to 27°, and has now, at three o'clock, 30°. Towards N. From the deck, a village on the left, and two on the right. N.W. by N. Three villages on the left, and one on the right; the former near the Haba, which is a quarter of an hour distant. Half-past three o'clock. From W.N.W. to N.N.E. Two villages on the left, a little remote from the shore. A very short tract E.N.E., and we round a long sand-head to W. Six hippopotami are enjoying themselves before us, as yesterday; and it seems that they retreat, when the stream falls, into the marsh regions, where they are more secure from man.

To N. Here we again see hippopotami and crocodiles near one another; they live peaceably together, as is generally known here, and a crocodile would never attack a hippopotamus, much as he might like perhaps his flesh. The latter has, indeed, like the elephant, a clumsy appearance, but notwithstanding this, he displays an incomparably greater activity in water and on land than the crocodile; besides, he is as courageous as a bull, as soon as he is provoked, and attacks men and tramples them under his feet, when he is wounded on shore. On the other hand, he is said never to go ashore from the water, when he is struck there by the harpoon, to pursue and take revenge.

We remark four villages in the neighbourhood of the right shore, or on the island of Buko. Nearly all

these villages are to be seen only from the deck over our cabin. Four o'clock. From N.W. to N.E. by N. The hippopotami appear angry at their tranquillity being disturbed by us foreign intruders. They move quite boldly near to the vessels, snort and throw up water, although they have not been offended, as they were previously, by shots, which are discontinued, owing to the great mischief perpetrated by these beasts at that time. From N.E. by N., immediately to N.W. Some trees come in view, and soon also a solitary dhellèb-palm—a pleasing sight which we had long been deprived of. For some hours we have seen no people on the shore, although three villages are found here again at a short distance from it. The purchase of slaves or kidnapping cannot be unknown to them, and they may fear a *quid pro quo* for themselves, and not trust the seeming peace. Half-past four o'clock. To W., a little way to S.W., and then W. by S., at which bend the river is scarcely fifty paces broad. Reed-shores throughout. From the very short tract W. by S. to S.W. by S. Here a broad arm goes to N.W., and forms an island at our right, where Suliman Kashef is already halting, whilst we are still clinging to the left shore. Five o'clock. Before us, to S.S.W., the river again separates, and forms another island. The right arm is our road, and goes S.S.W.; the left goes S.S.E. The latter appears to have become quite dry, for the negroes have drawn a barrier of reeds through it, in order to shut out the fish found in this gohr. We land at the first island. The arm lying to S.S.W. shews itself now as a gohr, discharging itself with unusual rapidity into the Nile, instead of forming our

track, for our course runs with the former great arm to N.W.

4th February,—Yesterday was the last day of the great Bairam. Selim Capitan and Suliman Kashef had called up all the skill of Turkish cookery to give us Franks a good dinner, at which we were the jollier because the Frenchmen had lost several bottles of wine in a wager. The river, flowing in S.S.W., and said to be an arm of the Nile, puzzles me exceedingly. According to the natives, it comes from the mountains above, and indeed from the Nile itself. If it come from above, it must make a considerable bend; for it flows from the left side into the river, and follows upwards its direction immediately from S.S.W. to W.: it must cut through, somewhere, the old sanded and choked-up primitive bed of the Nile, to come from E. or S.E. from the mountains to W. It might be possible that the half dried-up gohr, from S.S.E., serves as its main bed at high water, and this being sanded up, it had retreated now into the deeper canal. Selim Capitan found the breadth of this tributary, or gohr, to be eighty mètres near the before-mentioned solitary dhellèb-palm on its shore. The rapidity of its current is greater than usual in the White river, and amounts to three sea-miles and a half. Still it is doubtful whether it be a river discharging itself, or a Nile arm. Clouds, threatening rain, have shewn themselves for some days, and in the evening whole coveys of swallows are moving towards the N. We have seen no dhellèb-palms on the shores of our Kirboli, although there are some of them on the main stream. The Kirboli, therefore, may have already reached its termination here.

I hear, from Selim Capitan and his interpreter, who is well acquainted with this country, that we passed by two tribes yesterday afternoon; and I understand now what the natives wanted to tell me when we yesterday halted for a moment to wait for Selim Capitan. According to what the Bukos themselves said, they were as large a nation as their island. But this is incorrect; for at two o'clock yesterday, this tribe ceased, and was followed by that of the Tshièrrs, who possess both shores from thence, and reach to the neighbourhood of this place, where Bohrs appear on the right shore. The Tshièrrs have their foreheads stippled, like the people dwelling upwards, and use also the same language. Downwards from them the language is again allied to that of the Dinkas. It was, therefore, the little country of the Tshièrrs, where no one was seen on the shore, because they feared that we were set against them by the Bukos. However, the tribes above named, having similar tongues and descent, do not live in open feud, for I met myself with men of the Tshièrrs at the top of the island. A couple of them also were with Selim Capitan, and told him that their countrymen had fled from us.

It was here where I was so ill on our ascent, and yet was sufficiently sensible to request to be bled. Therefore, everything now is new to me, and I am the more anxious for intelligence about the stream territory of this place. As I hear from Thibaut and Selim Capitan, Arnaud applied himself to the sextant on our ascent, and found $3^{\circ} 48'$! Selim made himself merry at the engineer's expense, because he himself, on the first expedition, the limits of which were some

hours further upwards, had likewise found, or pretended to have found, 3° and some minutes. The difference, however, appears now by the calculation at not less than 3° !

We are here among the Elliäbs, who are constantly at war with the Bòhrs dwelling opposite. Twenty-four Bòhrs had come across to us to-day and brought us cows. The Elliäbs wanted to fall at once on these men, and to massacre them. We made earnest remonstrance to them to prevent such a scene, but they continued angry at the Bòhrs coming into their territory, and thought that they could provide us as well with cattle. The Bòhrs seem to be wealthy, and are better armed than the Elliäbs. They *hunt* elephants, but also catch them in pits as elsewhere. The Elliäbs have their foreheads adorned, like the Keks, with artificial wrinkles. They want also the four lower incisors, as is generally the case on the White Stream. The people are not muscularly limbed, but tolerably tall. They wear a feather on the head, or a coiffure like a flat basket, which may serve them as such, for it is only very loosely put on.

The war-dance which they performed in honour of us was of the same character as those we had hitherto seen, but it was executed here even in detail. They approach us marching in a column, with a leader at their head. The commander tunes the battle-song, and the chorus answer him. They run forward, and the column breaks, because in their wars they meet *breast to breast* ; they parry with their hands the feigned hostile darts, and avoid them, bending and writhing their body, and kneeling down. They

retreat, and the leader encourages them by a war-song, and even a woman steps out from their little company and sings to them to inspire them with courage, in quite a different melody, and with half-threatening, half-imploing gestures. The column has again closed, deploys a second time, and sings its answer in vehement and broken notes. We need not understand the language in such a warlike play, which reminds us irresistibly of the ancient Germans. They generally performed this dumb show with a pliability and truth of expression, such as no European *artiste* could imitate, unless he had learned their manner of carrying on war from his infancy. Moreover it does not seem that they carry shields, because otherwise they would have made the parry with their hand differently. When I think how skilfully the dexterous horsemen of the Shaigiës performed the well-known girid, or Dshirid game, threw the obtuse spears, parried them with the hand or the girid, which answers to the German *gerte* (switch), or avoided them, now I believe that the men of Bari mostly make use in their wars of the little hand-shields. The Elliäbs have brought cattle; but repeatedly declare that it is the same to them whether Selim Capitan gives them beads or not. Such proud disinterestedness has not hitherto come before our notice.

5th February.—The thermometer shewed, before sunrise, 15°; yesterday morning, however, 20°, but at noon it was not higher than 27°, and at three o'clock 28°, and fell after sunset to 26°. The hygrometer has been so disordered by Arnaud's master-hand, that he cannot even make use of it himself.

This morning was misty, damp, and cold. The corn was brought ashore from the vessels, and it was discovered that a great part of it was mouldy. The bad condition of the vessels is alone the cause of this, and Selim Capitan bears the blame, because he had not taken care to have them properly caulked before setting out. The people of this place have no ornaments on themselves, and not even elephants' teeth to dispose of. I could only therefore procure a broad iron bracelet, and looked with a kind of envy, when Selim Capitan despatched the sandal to the Bòhrs, on the right shore, and fetched off a number of beautiful elephants' teeth. Cultivation is not to be seen on and near our anchorage.

Selim Capitan asserts, that the questionable river is a gohr, which he saw in the country of the Liènns, flowing away from the main stream. I cannot persuade myself that I could have overlooked this, with all my earnest attention. We shall navigate it therefore this afternoon, in order to divest ourselves of uncertainty.

CHAPTER VI.

EXAMINATION OF AN ARM OF THE NILE. — FORESTS ON THE BANKS. — PRICE OFFERED IN ENGLAND FOR A LIVE HIPPOPOTAMUS. — THESE ANIMALS RARELY MET WITH IN EGYPT. — THE LIÈNNS. — ROPES MADE FROM THE LEAVES OF THE DOUM-PALM. — UÈKA. — CHARACTER AND DESCRIPTION OF THE LIÈNNS. — THE EMEDDI-TREE. — DÜBKER-TREE. — COTTON-TREES. — THE TSHIÈRRS. — TRIBES OF THE BODSCHOS AND KARBORÀHS. — LABYRINTHS OF THE WHITE STREAM. — BARTER WITH THE KARBORÀHS. — THEIR DRESS, ARMS, ORNAMENTS, ETC. — MOUNT NERKANJIN. — ISLAND OF TUI. — THE KOKIS. — CONTEST WITH HIPPOPOTAMI. — CROCODILES' EGGS. — HOSTILITY OF THE TSHIÈRRS TO THE ELLIÀBS. — EBONY CLUBS. — THE BÔHRS : THEIR SONGS, ORNAMENTS, ETC. — ANT-HILLS. — " IRG-EL-MOJE " OR WATER-ROOT, A SPECIES OF VEGETABLE. — VETCHES. — THE ANDURÀB OR ENDERÀB-TREE. — THE DAKUIN-TREE. — A SOLDIER STABBED BY A NATIVE. — ANTIQUITY OF DUNG-FIRES.

6TH FEBRUARY.—Yesterday the doubtful river was indeed investigated, but only for a very short distance, for the wind was contrary, and the sailors and soldiers murmured loudly, because they knew that this intermediate voyage, which threatened to delay their arrival in Khartûm, arose from the Franks. Under such circumstances, even the expressions of the natives of the country cannot be depended upon, for our black soldiers can translate just what pleases them. At first the river was said to come from the mountains above, and now they make it take its origin as a gohr near the Liènns. We had an interpreter with us, who is familiar with its shores, and

who returned to us at this opportunity. When he also confirmed the new assertion, the further examination was provisionally given up after a course of about an hour long. Where it flows down N.W. by N., we turned round and navigated W. by N. out of it back to our encampment. The projecting shore had deceived me, therefore, when previously passing by, with respect to the direction of this arm of the Nile. It is called Kiehr, which is the often-heard kir (water), thence Kirboli, Kirti, Kiti. There is therefore no doubt that the name of the White Stream, the main arm of which is called also here Kir-Te, is originally Te, from Barì to Khartùm, for it is even called Te Uri by the Nubas, the former word not being used for drinkable water. The country of these four arms of the Nile is called Kofon, corresponding to the Arabic mogren (conflux).

I repaired this morning on board Selim Capitan's vessel, and shall remain with him to-day, on account of his interpreter. It was not till this morning that it was at last determined to follow further the questionable arm of the Nile, which we navigated for a short tract the day before yesterday. Seven o'clock. We leave our landing-place, and proceed up the Kìèhr in a westerly direction. After a quarter of an hour the latter serves as a gohr to N., appearing soon to disembody itself into the stream, which we navigated previously.

We go some paces here S.W., where quite a little island, with high reeds, rises in the middle of the river. From W. to S.W., from W. to N.W. The Kìèhr seems to be rapid at its tide, and to exercise great force: we see it by the torn and indented

shores, and especially by the devastations on a little gohr, now dry. Half-past seven o'clock. A broad gohr flows away to N., and winds immediately N.W. Our river, which increases considerably in breadth above this Nile arm, winds W.S.W., and S.W. Before us a large forest ; near it we halt immediately afterwards.

At eight o'clock, a north-wind gets up, and we sail S.S.W., and S. by E. ; after a quarter of an hour, S.W., and W., and with a short bend, immediately to S. Right and left pastoral villages, with lowing herds and natives on the ant-hills. The huts have the form of a bee-hive, are five to six feet high, and plastered with Nile slime. The ash-grey people dance and jump, and want to keep us by force. The women run and sing by us, their hands thrown over their heads in real despair because we will not stop. Half-past eight o'clock. S. by E. The depth of the water not more than a fathom. On the left a long summer village and a harim of several tokuls close to it. We halt a moment at the right shore, take the wood which the negroes had already brought for us to the shore, give them some sug-sug, and proceed. The women, with large leathern aprons, who have gone away empty-handed, jump and make gestures as if they were mad.

A quarter before nine o'clock, S. Clouds threatening rain. At the right the forest close at hand. E.S. On the right a large pastoral village, with plastered beehives, looking like the bakers' ovens in the land of Sudàn. The cattle stand with their beautifully-twisted horns, close pressed together, and low at us, probably because they recognise us as deadly enemies,

and would rather be in the meadow than waiting here for us. We do not halt for the sake of the oxen, but on account of the vessels stopping behind, although we ought to take advantage of the favourable wind, as the water is falling more and more. Elliäbs are there, who are unarmed, but yet immediately begin their war-dance. The vessels have, fortunately, not been stranded, and we sail on at nine o'clock. The village is called Kiùì or Quùì, and is the boundary of the Elliäbs on the right side of the river. After a quarter of an hour, E.S.E. Half-past nine o'clock, S.E. by S., and in a bend to S. A quarter before ten o'clock, S.S.E., and S.E., where, at the corner, the crocodiles make a great rustling in the shallow water, and seem to be engaged in violent combat. At ten o'clock, S.S.E.

I am again very weak to-day, and cannot yet recover myself, for I want a glass of good wine; every moment I sink back upon the cushion, and can scarcely hold a pen. The Haba accompanies us continuously at a slight distance from the right shore. A quarter after ten o'clock. From S.E. to S.W., and again to S.E. We see many crocodiles wallowing about in the water, who do not look at us in a very friendly manner. Half-past ten o'clock. From S.E. by S. to S.W. The hippopotami, thirteen in number, are crowded like smooth rocks in the water before us. They spout up the water from anger at still larger swimming animals approaching, as they may conceive our vessels to be, for it does not seem that they are in conflict amongst themselves, or that they want to take the field against the crocodiles, who are keeping behind us.

A little before eleven o'clock some armed ash-grey men shew themselves, without any ornaments, on the right shore. From S.W. by W. to S. by W. We halt at the right shore to receive some elephants' teeth, but they are too old, and we bear off immediately again to S.E. In the forest at the right hand we perceive a number of birds and a considerable herd of gazelles, who stand in an attitude of curiosity like goats. Up to here the Elliàbs ran after us from the village of Kiùì. Half-past eleven o'clock. From S.E. by E. to S., yet not for long, but to the left S.E. At half-past twelve o'clock. We halt a second time at the right shore, owing to want of wood. I saw here a large oval shield of neat's hide, held simply by a stick. It belonged to an Elliàb; these shields are said to be used more in contests with animals than in war. This is perhaps likewise the case with the few larger shields in the country of Bari.

At half-past one o'clock we navigate again to S.E., and a quarter before two to S. by E. We see that the forest lies lower than the shores, and that the water enters it. This local quality of ground is the case generally, perhaps, in the forests. Either they lie behind the dam of the old shore, which prevents the mass of waters of the periodical rains from flowing into the river, or the Nile enters through the chasms of the shores, if they do not lie in recesses or old river-beds, where the rain water collects and remains on the clayey substratum, which is the very same even as far as the mountains of Bari. How could it be possible else that these vigorous trees (the Tihl or elephant-tree is particularly seen here), should

retain their magnificent verdure abstractedly from the atmospheric moisture.

Two o'clock. The thermometer this morning 18°, noon 26°, and now 27° Reaumur. From S. to S.S.E. and soon again to S. The north wind has slackened since noon; we navigate slowly, and must even content ourselves with libàhn, for no one has yet thought of taming river buffaloes to tow us in the water itself. Laughable as this may appear at the moment, yet I do not consider it impossible, for according to the crew, a young hippopotamus is as tame as a calf. The apothecary Laskaris possessed shortly before my arrival in Khartùm such a Nile calf. He wanted to make a vast sum of money by it, for they had offered in England a reward of some thousand pounds sterling to any one who would bring a live hippopotamus to London. It is well known that a living species has never yet been seen in Europe. His avarice did not allow him, however, to place the beast in some garden close to the Nile; nor did he provide a cow and fresh milk. He was even foolish enough to lower it into the cold cistern, where it died in a few days. Although this primitive animal was formerly indigenous in Egypt, yet now it very rarely descends over the cataracts to that country. Mohammed Ali had received such a beast as a present from Upper Nubia, which was kept for some years as a curiosity in a reservoir in the Nile at Bulak, the lower port of Kàhira.

Half-past three o'clock.—From S. to S.E. by S. On the right, in the badly planted Haba, the first doum-palms again, standing at the corner, which we pass by at a quarter before three, for a very short

tract to S.S.W., and equally rapidly S.S.E., to go at three o'clock again S.S.W., and immediately to S. A half-finished tokul-village rises very humbly between some old low huts. There were here benches in the form of couches, which I had not yet seen on the White Stream, although I had not exactly regretted their absence. They consist of cudg's, and every single tokul has its seat of repose. Half-past three o'clock. From S.W. to S. by E. Near the doum-palms, we see also solitary and unusually high poison-trees in the forest, at the right hand. The country appears very little populated; perhaps a sign that we are really in a tributary arm or gohr. This was also the case even where the Kìðhr disembogues near the Elliäbs. The scantier population may arise, in part, from the more recent lines of the shore being less constant. The solitary tokuls belong to fishermen, if we may judge from the sùrtuks and fish-baskets set up. Four o'clock. From S. in a bend to S.E. On the left a long and miserable village stretches along the shore, with nine carcasses of tokuls, and small tobacco-plantations. This appears also to be a village of fish-eaters.

Half-past four o'clock. Still the solitary tokuls, with fishing implements and sùrtuks. From S.E. by S., a short tract to S. The natives are of a friendly disposition, and laughed immoderately, when the sailors, among whom our Abu Hashis play the principal part, imitated the cry and laughter of the women. By the short stakes, which are already sufficiently known to us, we perceive that their ichthyophagism has a flesh-side. They also use the word matta (lord and king) when they address us. It may,

therefore be a borrowed word among them ; it is said also to be used in Habesh. A quarter before five o'clock, from S.S.W. to S. by E. A miserable village, with tobacco-plantations, on the left shore, but the divine smoke rising close by, asserts the old attractive power of meat. We stop for a moment, at five o'clock, at the right shore, as if we were about to land, but the drum is beat, and the tired crew must again to the rope. S.E. by S. The village at the right shore, before which a little sycamore hangs over the river, is better built, and its several magazines testify that the people apply themselves to agriculture. Half-past five o'clock. At the upper end of the village the river winds in an arch S.E. by E. We see continually doum-palms in the forest of the left shore, whereon a village rises.

At last we are again close to the main stream, and near the Island of Buko. At sunset we halt at the right shore S.S.E. We see from hence the trees near which, a few days ago, we lay at anchor by the village of Buko, and also the village itself, but separated from it by land, and our gohr,—the presumed river, winds to the right.

The Liènnns dwell here ; and the interpreter already dismissed, Gùmberi, who had left us in Berize, the capital of the Bambers, came to us again. Clothing appears here to be the privilege only of the chiefs, for Gùmberi was obliged to take off his red shirt, it being against the Ethiopian regulations about dress, and he was asked whether he was a sheikh. (I use here, as throughout my book, the word sheikh of the Arabic language, as the most significant in analogous circumstances.) There are many doum-

palms here, especially young copse, upon which the sailors pounce, and take the leaves to make cords of them. I see, to my sorrow, that they do not even spare the narrow convoluted hearts, which are four to five feet long. The leaves are plucked, laid in bundles upon a stone, and worked with a stick, till they are split into fibres; then they are again twisted together, sorted anew, and laid, like coarse hemp, in the sun to dry. The very same process takes place with the inside bark of various trees. I got, subsequently, in the country of the Shilluks, a small handful of flax, which, according to my Tshauss Marian, was prepared from the bark of the Baobàb: this tree is called in the Nuban language, Omràh; its fruit, however, Tabeldi. It is whiter than flax, shining like raw silk, and feels exactly like the latter.

7th February.—The beating of the doum-leaves goes on again at daybreak, as if the crew wanted to acquire enormous treasures by them in Khar-tùm. It appears as if we shall remain here to-day, on account of the doum-palms and hunting. Our encampment is an old bean-field, from which my servants brought me, in a very short time, a number of beans, quite young, to eat as a salad. Unfortunately I must begin to be sparing of my vinegar, for it is truly welcome to me in these regions, as the most refreshing restorative, although it causes thirst afterwards. I have almost entirely renounced meat, and live principally on coffee, biscuit and uèka. The people cannot subsist without this dried bamie, and therefore my men have laid in a plentiful stock. Rubbed to a meal on the murhaka, I have it boiled to a

thick pap, with onions and the pepper of the country. (fillfill bèlladi), and I afterwards pour vinegar over it. I remarked this morning that Arnaud noted 82° atmospheric moisture, although the hygrometer has entirely left off working. I made him comprehend that this was somewhat too much here ; he took the thing, however, as a bagatelle, and said that it would rectify itself afterwards !

The race of the Liènns, who dwell here, is called Kikin, and the T'shièrrs live opposite. The Liènns are friendly, and even sociable : they allow themselves to be joked with, and take the blows with reeds, which the sailors deal them, as play ; but do not venture to return them. Though these people are inclined generally to jesting, and merry scenes often take place with our wags, during which the former are a pattern of good humour, yet they still remain extremely mistrustful in barter. It is not till they have grasped the beads firmly in their hands, that they let the goods go which are to be given for them. I remark that the number of the stippled lines on their forehead is usually from three to five ; we see many also with quite a smooth forehead. Their weapons are better than those of the Elliàbs, and they exhibit, on the whole, more wealth, not only by their ornaments, which, indeed, *per se*, are insignificant, but, in particular, by a certain plumpness of body, denoting better nourishment.

They bring us baskets, very neatly plaited, of split bamboo reeds, square at the top, and protruding spheically at the bottom. I get some bows and arrors, perfectly similar to those of Bari. The arrows, with wooden or bone points, are principally only des-

tined for the chase, as also the spears, with barbs. Iron is dear here, and they did not like, therefore, to sell their javelins, some specimens of which I had acquired previously. They tell us that there are several lions in the neighbouring Haba, and want to prevent us from hunting on that account. We remained on land to-night, with just confidence in the good disposition of the people, as we had done previously among the Elliäbs, and set sentinels on the shore.

8th February.—I repaired early this morning to the forest, and returned in two hours, just as Arnaud was setting out, in company with Suliman Kashef and his men. Suliman altered his mind suddenly, alleging, as a pretext, the heat; and Arnaud also, who, before sunrise, was going to slaughter lions and tigers, composed himself very submissively to return. The doum-palms, if they do not form a single species, have a meagre appearance, and but little height; the doum-copse, on the contrary, stands very luxuriantly, and measures sixty fingers' breadth in a fan. The negroes have really no dome-fruit left, and the elephants may have had the beginning of it, and the gleanings. The poison-trees are unusually large here.

A tree attracted my attention, by its size and light-coloured branches, similar to those of the sycamore. Unfortunately it had lost, like the baobàb, its leaves, except a few. The ends of its boughs, from which the leaves develop themselves, have buds similar to those of the chesnut-trees. Mariàn says that this tree is called Emeddi, and is present on all the mountains of Nuba. According to him it has small flowers, and little fruits of a reddish colour.

These are as large as clusters of grapes, and hang together in the same manner, only somewhat looser, are very sweet and eaten. The elephant-tree (in the language of the Nubas Tihl, or also Or Omul—Or, tree, omul, elephant) stood in abundant verdure, with long young fruits. As I now hear, its fruit is eaten by the Nubas only in case of necessity. If we consider this tree, with its shady roof of leaves and its magnificent long clusters of flowers and fruits, we feel inclined to look upon *it* as the Persea, or arbor cœlestis of the hieroglyphics, and not the leafless baobâb, which is mostly a ruin without shade. In Kordofân, the Or Omul or Tihl sheds, moreover, its leaves, as the beautifully foliated Emeddi does here.

Another tree pleased me, which was covered with white flowers, as if with snow. The small, pointed, and succulent leaves are something like those of the pear-tree, as well as the tree itself. Four white leaves are arranged around eighteen long blue stamina. The fruit is said to be as large as an egg, and is eaten. The tree is called döbbker, and is also indigenous in Nuba. Among the mimosas we remarked only *talle*; *sunt* seems not to present itself at all in these upper regions. Nearly all the wood of these trees is soft, and was felled to be worked into pulleys and other things for the vessels. As the bark of the muddus-tree is better than all the others for ropes, and does not appear on the great Nile, it was eagerly sought for. I found also some cotton-trees with small leaves, in the Haba, which lies tolerably high, and presents an extensive view. Honey is found here in the ground, and on the trees, but the little cakes contain only a small quan-

tity. A large durra-field in the Haba lies, on the whole, high, and falls away to E. and S.; the soil is strongly mixed with sand. It must rain here, therefore, for a long time, and continuously, as the powerful growth of the trees bespeaks, because otherwise durra, even were it ever so rapid in coming to maturity, could not thrive without artificial irrigation.

The Tshièrrs live in friendship with the Liènns, whose language they use, and have the very same *insignia* of race on their foreheads. Wherever there are boundaries, such as the river here, then there appears jealousy and discord. A little slave of Selim Capitan's begged to be allowed to throw into the water the other boy, who was not, like himself, a Tshièrr, but a Liènn, because he dwelt on the other side of the river. In other respects both these tribes live in peace; and yesterday a Tshièrr brought us a young slave-girl purchased from the Liènns, and she was bought in exchange by Suliman Kashef. We have already become too intimate with the natives by our two days' abode for the Turks not to commence civilising them after their manner. At the head stands Selim Capitan, who is really earnest about the matter; at his side, Sulinan Kashef, who is not behind the worthy son of Crete in cultivation, and likes laughing and amusement. The thermometer had this morning 20°, noon until three o'clock, 27° to 29°, and after sunset 27° Reaumur.

9th February.—At half-past seven o'clock this morning we leave our encampment, and go by the rope E.S.E., and soon S.E. A summer village lies at the right shore, and an island in the water, which is low and covered with green vegetables. Two

tokuls are upon it, surrounded with high fish-baskets and hedges of cut simsim, which appears to be dried in this way. I remark on the island as well as on the steep disrupt shores, that the lower thick layer of earth consists of black mould, whilst the middle stratum is red with iron particles, and the upper one strongly impregnated with sand. The arable land here appears not to arise from a general deposition, but has its commencement from the slime of a lake, and the remains of a subjacent vegetation for its formation. The north wind has set in, and we navigate round the island in S.W., S.E., and S., and sail at eight o'clock S. by E. Immediately afterwards S.S.W., a small island before the forest on the left shore. Eight o'clock, S.E. Here the island will soon end. Then to S.; solitary farm-yards on the right and left on the low shores; cultivation before the rising Haba. A quarter before nine o'clock, S.S.W. The left shore is covered with young dome-palms, and a large widely scattered village ascends gradually with the shore to the height of the Haba, in which we remark a number of large dome-palms. The margin of the shore stretches flat along the river, and before it lies a completely shallow island, or peninsula, whereon a quantity of fishing implements are lying about. Nine o'clock S., then S.S.E., and S.E. Right and left, the level land is well cultivated with durra, simsim, and especially lubien.

The wind changes after nine o'clock to E. We furl the sails, and halt at half-past nine o'clock, at the left shore, after we had first gone a short tract to E. by the rope. There is a very little isle in the river, and near the trees on the left shore a hamlet,

under which the edge of the shore is also cultivated. From deck we perceive five other villages, of which one is large, at a slight distance from the water. The Haba retreats for an hour. At the right shore are two villages, and the Haba is still further distant.

The people of the Lienns are, on the whole, poor in ornaments and weapons, although individuals carry two or three spears, and a bow with arrows, without quivers, in the left hand. They have the heads of the spears generally turned towards the ground, which was not the case further up. This is perhaps rather a sign of friendly sentiments than their usual custom. They fear, as I saw yesterday and the day before, even the smacking of the great, long whips, that the sailors have made from bark for their amusement. They like to look at the beating of the palm-leaves, and then the sailors cannot forbear dealing cracking blows right and left, with the dome-leaves, and running after them. The Lienns understand a joke, and laugh, run away, and return immediately again to let themselves be cudgelled anew. They are great children, who are happy at seeing us and our doings, and playing with the soldiers, although the jests of the latter are often rude, and at times even end with plunder.

Ten o'clock.—We proceed with the libahn E. by S. Half-past ten o'clock. From S.E. to S.W. At the left lie four villages, tolerably close together, and on the right rises, at a quarter of an hour distant, a considerable village between trees, on the gentle height of the Haba ; before it a large level field descends to the edge of the river. Soon again to the left round to S. by E. A crowd of natives, amongst whom are

also some coloured red, welcome us from all sides. Our gohr is not above fifty paces broad, but has a strong fall. Nothing is yet to be discovered of the main stream, and we begin now to doubt in our very tedious voyage, whether we did see on the 6th instant our old anchorage at the island of Buko. A quarter before eleven o'clock, S.E. by S. Not far from the right shore, a large village, near which we hear the lowing of herds. The shore is cultivated, and we see there some magazine tokuls, and whilst we are going S. by E., we perceive from the deck another large city in the Haba. Opposite, on the left shore, some tokuls, and a numerous herd of cows.

Eleven o'clock. From S.S.W. to S.E. and E.S.E. Half-past eleven. From E.N.E. to S.E. At twelve o'clock we stop near some tokuls on the right shore, to allow the crew to eat. The upper boundary of the Bodshos, who follow the before-mentioned Kikins, is in the neighbourhood, and the Karboràhs begin here, who also belong, with the first named tribe, to the nation of the Liðnns. They dwell on both sides of the river, and live at war with each other. In a quarter of an hour we move on again, and go in short bends S. by E., E.S.E., S.E., and S.S.W. From the deck—four villages on the right, and three on the left. Half-past twelve o'clock. For a finger's length to S.E., and then S. and S.W.; a quarter before one to S. One o'clock, S.S.E. On the left two villages seen from the deck; on the right an island, covered with high grass. We must think no more of an island of Buko, for this gohr is said by the negroes to lead up to the mountains; and I had therefore heard quite correctly, at the very beginning, near the Kofon of

the Elliäbs and Bohrs, where this very same thing was said plainly enough.

If we suppose that we shall again be connected with other arms of the Nile, for we were near such a one on the 6th inst., which I still hold to be that of the island of Buko, our return voyage, with the present waste of time, might become more difficult than is expected. We should be obliged to wait for the commencement of the hariff (rainy season), or to seek to regain King Làkono's sympathy, which we have forfeited. The want of good bread-corn, already beginning to be felt, is the only thing that makes me fear the crew would not then be induced to follow further the White Stream beyond Bari.

The Abu Hashiff of Suliman Kashef proclaimed this morning a punishment of five hundred blows of the cudgel to any soldier or sailor who should be found to have delayed slaughtering his goats or sheep till to-morrow. They had collected together at different times, by purchase, theft, and robbery, several beasts, whom they were fattening with durra, to sell them in Khartûm.

Sandbanks also appear with the increase in width of the gohr, and render the navigation difficult. A quarter before two o'clock, a short tract, S.S.W. and W.S.W. Two o'clock, W. by S. A broad gohr flows here from our arm to S.E., and makes the land at our left a large island. We go, however, up the stream, and wind W.S.W., where we halt at the right shore. It is asserted very positively that we have navigated up and down that broad gohr flowing from here, and that therefore the continued ascending in the gohr, in which we are at this moment, and which

also is becoming broader, has no object. It matters not, however, whether we are blind and do not see, or whether we see as we wish, so that we only go again downwards. Our river arm has suddenly here again a width of three hundred paces. This, as well as the depth of the water, speaks, certainly, in favour of the sailors' opinion, that we are again on the main stream. The supreme council would fain, of course, assent to this opinion, but, to my great astonishment, I hear it is very much feared that we shall lose our way in another stream territory, and not come out at all by Khartûm. In order to prevent our returning by the very same road in our gohr, I propose to navigate up even as far as the mountains, to set ourselves right, or at least to find some memorials, such as a village or natives that we had seen previously. Our men, however, put no more confidence in what the latter say, and the crocodiles and hippopotami give us no intelligence. The blue-green broken corals which we had found already in the kingdom of Bari, are still the same here, and are preferred by far to those of a white colour.

At half-past two o'clock a north-east wind set in, which blew the *wise council* asunder. A short tract to E.S.E. by the rope, and we sail then S.W. by S. in a flat arch to S.W. with two miles' course. The shores are low and only three to four feet high. The green forest developes itself behind the slender, half-dried reeds. A quarter after three o'clock. From S.W. with a short bend to E.S.E. ; at half-past three o'clock E. by N., and at four o'clock S.W. by W. The shores have been for a long time without cultivation, and only here and there we see some negroes,

but yet there are two large villages, a quarter of an hour distant from the left shore.

It is scarcely four o'clock when Fadl tells me from the mast that he sees a high mountain W.S.W. I remark its peak also immediately from the deck. To judge by the outline of it, it appears to be the Nerkan-jin, but I do not wish it, as I would rather see another beautiful mountain country. Whilst we are sailing S.S.W. a gohr issues on the right from our mysterious river to W.N.W., and makes, therefore, the land at our right, a large island. What a happy combination of natural canals, and what nations may be still drinking of this water! A quarter after four o'clock, S.E. by S. Right and left a village on the shores. There are low tokuls with clay walls and square doors: the roof consists of leaves of the dome palm. Their large baskets are also composed of the hearts of these trees. The village of the right shore has many open tokuls or cattle-stalls, and enters tolerably far into the land, where we observe several herds. Half-past four o'clock. From S.E., with the broad beautiful bend of the river to S. by E. At five o'clock we stop opposite a large village on the right shore, where many natives are collected. The thermometer, 20°, 28°, 30°, and 27° Reaumur.

10th *February*.—At the first sight of the morning dawn we heard the great wooden kettle-drum (no-gàra) sounding opposite in the large village of Karborah, which instrument is beaten for amusement, as well as for driving out the cattle. The watch-houses of the cow-herdsmen stand in the centre of the enormous herd; the employment of these men may be taken in turns like that of the night-watch. The tribe

of the Karboràhs, who, as I have said before, are a branch of the Liènnns, and independent, is here likewise not entirely stippled on the forehead. Yesterday evening we traded with them, and I received many a pretty thing, principally of iron; for they dwell nearer the mountains, the source of iron wealth. Thus, I purchased ivory bracelets, with black streaks; bows of bamboo, with iron ends, and narrow bands of iron; ropes of bark, which, according to Mariàn, are from the muddus-tree, and the strongest; some hair-lines, said to be made from giraffes; thin iron chains, which they sling round their ribs; but I could neither see a kettle-drum nor an antelope-horn for blowing. It was with much trouble that I got a surprisingly beautiful little he-goat, with a head like a gazelle, although the other little goats have compressed noses. Selim Capitan was looked upon here also as our matta; and they wanted to take by force a large elephant's tooth, which I had already bought, to present to him, not returning, however, my thick glass beads. Several Nile buffaloes are found in the river—a sign in the present season of the year, that agriculture is diligently attended to in the vicinity.

At eight o'clock, we set off from S. to S.W.; a quarter before nine o'clock, from S.E. by S. to S.S.E.; on the left a hamlet. A quarter after nine o'clock, S.E.; and we sail with the good east wind immediately again S. and S.S.W., and make three miles. Half-past nine o'clock, S.E. Cultivation at the right side, and a watch-house in the tobacco plantations. It seems as if tobacco were considered, in the opinion of our people, an article of luxury which may be taken when-

ever they like, without injustice. The tobacco plantations are sheltered here also with reed-mats erected on sticks three feet high, as a protection against the scorching solar rays. Immediately again S. Dancing, clapping, huzzaing, and young girls and women singing on the right shore.

A quarter before ten o'clock. From S.S.W. to S.E. The wind is very contrary, and drives us together to the right shore, where we make use of the rope for a short time. The merry girls and women are adorned with rings and necklaces; only the head is shaved, as in the other places, and they wear no rings in their ears. They have the sitting-skin already mentioned behind, and the narrow rahàt before. Moreover, most of them are armed with bows and arrows, probably for self-defence in the absence of the men. A quarter after ten o'clock. We sail again to S. We remark no villages, and yet there are several people on the right shore; the habitations seem, therefore, to be up the country in the Haba. It was not till after a quarter of an hour that a large village appeared: soon afterwards a second, the inhabitants of which have collected on the right shore. About eleven o'clock we double a little island on the right, and at the left a broad gohr, with a strong fall, flows in from S.E.; near it lies a still smaller island, like a grass-shield, bulging out in the middle, which we also leave on the left. Half-past eleven o'clock. From S. Libàhn, E.S.E. Herds right and left; shady roofs on four stakes. My men have bought a large wooden drum for me, and throw it down the shore; but several natives, who are against the sale, jump after it, and take it back by force; it seems to be the property of

the community. Twelve o'clock. From E.S.E to S.S.W. In the background an island ascends.

The negroes wear frequently small animals' skins on their heads, which hang down over the nape of their necks. The sun has as injurious an effect here on the former as on the vertebral columns of the latter. A quarter of an hour later to S., and our corpulent friend, Mount Nerkanjin, steps forward from S.W., blue and boldly, from the background over the above-named island, near which a gohr flows from W.S.W. At half-past twelve o'clock we lie to at the right shore, near the same, to let the men rest and eat. I could not tell what made me so hot, but the thermometer shews just 33° , although this morning it was only 20° , as usual. We only stop twenty minutes, and the poor crew must again to the rope, S.S.E. After one o'clock, we halt a second time near a little island, the narrowest arm of which we soon follow, on account of the greater depth. The current in this canal, which has fifty to sixty paces, is uncommonly strong. Two o'clock.—From S.S.E. to S.W. by S., and immediately to the left S. by E., and right S.S.W. A quarter after two o'clock.—A magnificent east wind: we shall make four miles to S. by W. and S.S.W.; but it slackens immediately after casting out the log, and only refreshing breezes breathe through the windows. In order to get from this place, we assist the hoisted sails by libahn. A small island before us closes the narrow reach of our course, which our ship, until half-past two, nearly fills up. Three o'clock, S.E. by S, and on the right round a corner S.S.W., a few paces, then immediately left to S., where we stop a moment. "El

Bah'r kebir ! " our people are shouting on all sides ; for they take the broad stream, wherein we are now sailing, for the White Nile itself. An arm separates from it to N.N.W. ; the last land on the right is therefore also an island. We go by the left shore of the main stream, where it winds from S.S.W. to E.N.E. It is called here, as up the river, Kirboli, and both sides of it are inhabited by the Elliàbs ; therefore there is no doubt that it is the main stream. The great island just mentioned is called Tui. We proceed at four o'clock to S.S.W., and Mount Nerkanjin remains in a south-westerly direction as previously. Half an hour later, we go from S.S.W. to S. ; still no village, nor familiar tree appears ; even the sailors begin again to doubt—for aught I care,—only forward ; so that at last it must be resolved to wait for the rainy season. At half-past four o'clock S.S.E. ; we halt on the sand, and no one appears to be sure of his point, least of all Arnaud, who cannot comprehend his own journal.

Every doubt is removed, after considerable questioning of the natives ; we return a quarter before five o'clock from this ascent, and stop above the Kièhr, which we had come up from the White Nile, in order to examine it, even to its issue, and had taken hitherto for an independent mountain stream. At six o'clock we go to the neighbouring island, between the Nile and the gohr Kièhr. At sunset 29° ; this will be a hot night.

11th *February*.—We remain near the large island of Tui, make a section of the Nile, and find the main stream below the bay, where it divides into three arms, a hundred and twenty-eight mètres broad. It

is called here Landofò ; the Kokis inhabit its left shore. The Liénns possess the right, together with our island, and the shores of the gohrs, between which is the island of Tobo. Only a few of the latter tattoo the forehead ; some, the shoulders, as far as the upper part of the arm ; and others, the upper part of the back : some have also coloured themselves with ochre.

12th *February*.—Observations are to be made also to-day, in order to start in the afternoon. I purchase for a few large glass beads, the first *fine* elephant's tooth, and I design it, being the largest of all, as a cabinet specimen for my country. Now, at last, it is evident to every one, that we are navigating back our old road. It is fortunate for me that I am able to set up continuously and write my journal, affected as I am with fever all the day after the hot nights. At half-past two o'clock we bear off, and reach at half-past four the end of the island of Tobo, near which we land at sunset by the left shore, having made four miles and a half with a strong current, and the stroke of the oar. Thermometer, in the morning, 20° ; noon, 32° ; evening, 30°.

13th *February*.—We are to set out half an hour after sunrise ; in the meantime the men are slaughtering in haste some cows, which natives of uncommon size have brought us. We do not proceed, therefore, till seven o'clock, in a north-westerly direction. The river makes such short bends that we bound every moment against the shore, notwithstanding the very strong fall, and we tear off also a corner of the loose earth. This, as well as the carelessness in steering, causes the vessel to draw water continually. Nine

o'clock. We stop at the left shore, near some dome-palms ; the water is a little deeper here, as if a broad arm of the Nile, from E.S.E., joins with our narrow one, or we with it. Here also they bring us cotton for sale. Eleven o'clock. We go on with a favourable east wind. The tokuls for dwellings are the peristyles already described. At noon we see several hippopotami, some of them real monsters ; these may remain here pretty constantly, being perhaps their hunting district, because the river is, on the whole, of great depth in this place.

We get on a sand-bank, close to which several crocodiles are encamped. The first of these beasts (in truth a fearful leader) attacks the men who are pushing the vessel off the sand-bank ; then a soldier jumps overboard, armed only with a hatchet (Chadàn), boldly meets it, and really drives it back into the water. At this moment shots were fired by the soldiers on board the vessels at the whole congregation, but so badly aimed that not one remained dead on the spot ; they all made a slow retreat into the water, and we found afterwards, in the moist sand on the shore, fifty-three of their eggs lying together all of a layer. The shells were a little broken, as if cracked, which may be caused by the sun and the humid sand. At first I thought, indeed, that these eggs might be near hatching ; but I was persuaded of their freshness, when the crew eat them, roasted in ashes, with much goût. I tried also a little one, and found the usual taste of eggs, only it seemed to me particularly dry, and the white was more spongy and not compact. My servants had preserved eight of the eggs, which I put among those

found in the neighbourhood of the crocodile shot by Suliman Kashef. I see that the latter are smaller, but thicker and rounder than the first-named. In general they do not exceed the size of a goose's egg, and differ from birds' eggs, especially by both ends being uniformly arched. When I compared these eggs subsequently, in Khartùm, with another one, found by me lying openly in the sand of the shore of the united stream, on our journey to Sennaar, I found the latter to be considerably larger than those of the White Stream. Without wishing to decide by this, on the different species of crocodiles, I remark that the people here well know that there are such distinctions. At one o'clock, we halt at the right shore, near a pastoral village, but do not find the expected oxen. About five o'clock we push off again, and a Nile arm divides to N.E.; then comes another from S.E., and winds E.S.E. This is the arm, according to the general assertion, which we previously ascended.

14th February.—We at eight o'clock, navigate, the gohr, which is new to us, and goes from N. to N.W. Right and left dwell the Elliàbs; also on both shores of the gohr from whence we came. The Tshièrrs follow the Elliàbs; their boundary is determined by some dome-palms. The former made, yesterday, a marauding and murderous attack on the island-land enclosed by the gohr, and killed several men; they were, however, put to flight by the Elliàbs, who hastily collected, and were driven over the water, by which they left three dead. The Elliàbs mean now to make a great war against them, and would not, on that account, sell us any of the few spears which these

poor pastoral people possess. The Kièhrs dwell, according to the inquiries made by Selim Capitan over the island, on the right shore of the Nile arm, which we ascend, the river being also called there Kièhr, as we have already mentioned. This circumstance may have led Selim wrong, for the Bohrs dwell there, as I ascertained with the assistance of my Jengàh. After a quarter of an hour, we again stop close to the left shore, where our river-arm, called here the Kir, flows to N.W. Hardly any people come to us, and the few we see are dirty, covered with ashes, and without ornaments. Their spears, small in number, are however kept polished, as the negroes generally clean carefully every thing pertaining to weapons, and iron decorations, except when they have coloured red with ochre their entire bodies, and then every thing they carry on them and with them is dyed with the same colour. We see clouds, foreboders of rain, almost uninterruptedly in the sky. Thermometer, at sunrise, 21°; from twelve to three o'clock not more than 30°, at sunset 29°. The Frenchmen add still more degrees, and see also more, in order to frighten their readers at such a country.

We go, after a short halt, to the right shore, where there is a large cattle village, with many sleeping-places and plastered bee-hives, or tokuls, their tops being lightly covered with straw or reeds: large herds there. We navigate, with the stern of the vessel foremost, although the captain is on deck, towards N.N.W., and shall halt immediately at the left shore near a little pastoral village. The red colour of the large heaps of ashes arises only from the burnt cows' dung. 3 o'clock. Selim Capitan has just returned

after a long voyage downwards. No water ; therefore libàhn again, back into the gohr traversed previously. I procured to-day, from the herdsmen, four heavy breakers of beads or hassaeis of ebony, without ornament ; and I see also here old woollen morions, of which I possess already one specimen. The Frenchmen still keep their windows hung with curtains or closed, so as not to be disturbed by the exterior world. At half-past four o'clock we are so fortunate as to enter our old gohr E.S.E., and come soon to the old encampment (I am again ill, as I was then,) > turn the bow foremost, go N.W., and stop at sunset to N. at the left shore. I purchase a miserable little stool, which is rare here, from the Elliàbs.

15th February.—I have received, from Selim Capitan, a Bohr, as drogman, but he will do nothing at first, for he is too hungry. The river flows at half-past six, and up to seven o'clock, continually to N., with declinations to N.W., where a small island appears on the right. Again N. ; on the left a large pastoral village of the name of Uadir, belonging to the Elliàbs, or as our Bohrs call them, Alliababe. The Bohrs possess the right shore, between whom and the Elliàbs eternal war prevails. N.N.W. : on the left a little island. Half-past seven o'clock. Over the dry straw of the shore on the left green copse is sprouting, the tree-tops of the neighbouring forest. Some drops of rain fell to-night on Feizulla Capitan's fiery brandy-nose, as if on a hot stone, while he was sleeping on deck ; now, also, I feel some drops on my cool, pale nose. A fine prospect ! for neither are our corn magazines well covered, nor our cabins air-tight above, thanks to Selim Capitan's negligence. From N.N.E. imme-

diately again N.N.W. Eight o'clock. Right and left a forest, preceded by a narrow border of the shore. A little island on the right displays its green margin of reeds and creepers, as we see in all of them. We halt at the sandy right shore: the left is fertile soil, which is also the case on the right, though only for a short tract. Suliman Kashef's mallem was buried here the preceding year, and Suliman visited now his grave under the trees. Opposite to us lies the tolerably large pastoral village of Kelagò, a portion of which only I draw, because it is like all the others. Thibaut also has applied himself to the ivory trade; he has just acquired three elephants' teeth. Half-past nine o'clock. Away to N. and N.W.; at ten o'clock, a small pastoral village on the left, with ash-grey people. The forest extends at one side, and was refreshing to us, with its various tints of green. Here and there the sun breaks through the clouds, and casts picturesque gleams of light around; I can even enjoy it, for I feel myself again better after the very strong perspiration I had in the night.

The Bohrs have lines on their foreheads like the Eliäbs, not waved, however, like the latter, but straight, and also broader. The drogman has five, which appear to consist of double lines. A quarter after ten o'clock, N.N.W.; to the left an islet, with flowering creepers and reeds. We are welcomed with a song, for this is the usual custom with the tribes below Bari. One leads the choir, and the chorus joins continually with "jok, jok, are o jok;" but they have several refrains, among which their "abande jok" should not be forgotten. At eleven o'clock N., uninterruptedly, like our direction. with the former deviations to W.

and E., the eternal enumeration of which would only be tiresome. I know enough of the previous ascent to be able to control my French companions. We stop at half-past twelve o'clock at the right shore by the Haba, and push off at half-past one again to N.N.W. The nation of the Bors, or Bohrs, is likewise poor, and nothing was to be purchased from them but some teeth, which Matta Selim Capitan appropriated to himself. The tribes hitherto seen have, on the whole, the same sort of weapons, although some arms are only similar; everywhere we see solitary spears, similar to those of Bari. It seems generally that all iron work is manufactured in that country, according to the taste of the different tribes, which is frequently indeed very bad, and sent away from thence; many, however, may have been introduced by intercourse with nations dwelling at their side. It is a cool north-west wind.

Thermometer, Sunrise 23° to 24° . Noon 27° . A quarter of an hour later an island five minutes long shews itself to the left in the middle of the river. We go N.N.W. At the foot of this island, another one, small and low, and, as it appeared to me at first, cultivated; but this, however, was not subsequently confirmed. Our course passes between yellow and light-green copse and other trees. Only here and there, there is still a dome-palm, quite small or young; yet they probably serve for the canoes here, for I observed several of these boats on the shore. Two o'clock. N.W. An island in the centre of the river which we leave at our right; then N.N.W. I have convinced myself, by *new* ant-hills, that these insects, which are somewhat larger here than the common ant, raise the earth from a depth where it is entirely

wet, black, and without admixture of sand (such as on the level of the Nile, and in its neighbourhood), to make their buildings durable. On the other hand, I remember the fallen-down craters of the ant-hills among the Dinkas. It is now evident to me that they openly seek a protection against the weather by getting under the trees when there are any in their neighbourhood. The shores shew here already a little oxyde earth. Half past two o'clock. From N.N.E. to N., whereupon we halt at the right shore; for the Frenchmen want to go hunting.

16th February.—Thermometer yesterday evening, 24°; this morning, 19°. I made an excursion into the interesting forest: it lies upon slightly-elevated sandy bottom, on which the dome-palms do not grow so luxuriantly as in the country of the Tshidrrs, where I counted sixty lances on one leaf, whilst here there are only from forty-two to forty-six. I had preserved previously a vegetable, though not knowing the nature of its root: here the sailors grubbed up some of the same sort, and I saw tubers on them three feet and a quarter thick, running towards the upper part to a round form, but appearing to branch out below like enormous roots. Slender roots shoot from these main tubers, and on them rises an insignificant-looking vegetable, a foot high, covered at the top with small oval pale-green leaves, like those of the box-tree: the clusters of gossamer-flowers are of a yellowish colour. It is called "Irg-el-moje" (water-root)—in Nuban, "Otto;" is very full of juice, but of a nauseous, sweet taste, and is sold in Kahira. The suckers, properly speaking, must by virtue of the soil here, go to a great depth. Our liquorice tastes per-

haps better, owing to its dryness. The large specimens were cut to pieces and torn, by reason of their softness, and in consequence of the greediness of our crew, who are like children, and yet laugh at the blacks. I took a specimen for myself. The beautiful red peas or vetches were also found. This vegetable was gathered; but no one at first knew the foliage, until I discovered at last a few slender tendrils of vetches, which were still green, and hung together with the dry peas in the pods, which were burst open. The blacks and men of Belled Sudàn make use of them as an ornament. They are small, hard, and rough, like beads, have a black eye, with a white and scarcely visible line, and are called hap-el-arùss (bride-grain). I have in my possession several of them. The anduràb or enderàb, a large tree with willow-like lacinated bark, is very common here: it has little green clusters of flowers on its lower branches, hanging in wild disorder; small round fruit, at present green, and willow-like, yet truncated leaves. Besides many other trees, such as talles, geilids, and others, there is also a very large tree, now thoroughly leafless, deserving notice, from its short prickles, and little apples. Mariàn tells me that it has small round leaves, which make their appearance in the hariff, together with a white flower, and that it is called, in the Nuban language, dakuin. The fruit is not eaten, but gathered green, and strung round the necks of children, as a preventive against fever and other diseases.

We do not perceive grass anywhere, and therefore there are not any cattle or human beings; but there may be, perhaps, many wild beasts. Wild

buffaloes, as I had been assured previously in the upper Haba, and several of which animals Suliman Kashef and Capitan Mohammed Agà, the Arnaut, with the halberdiers of the former, pretend to have seen, are said to be frequently found here, and larger than those of Egypt. We are more inclined to believe this assertion, because it is well known to all our blacks that such beasts often appear among the Shilluks, Hassanies, and elsewhere. This animal is called "Gamùs el galla."

This morning, unfortunately, a soldier was stabbed by a Bohr with a spear, because, as I suspect, he was about to take it away from the latter according to the favourite Belesh manner, that is, without paying for it. We were magnanimous, and did not take any revenge on another Bohr, who was dragged to us instead of the proper criminal. So likewise I see the *voluntary* slaves of Selim Capitan chained together on the shore. At one o'clock we leave our beautiful landing-place. On the left a little village appears, then also a Haba; but it is too scantily furnished with trees, and soon retreats ashamed before the magnificent forest opposite. After some minutes a reed island divides the river. Then we proceed with W.N.W., our sails swollen by the east wind, and leave it to the right whilst we go more westerly, but soon again N. The burning of the reeds has an unpleasing effect to the eye, but the country rises new-born like a phoenix from the ashes. The island is fifteen minutes long. Half-past one o'clock. From N.E. by E. to W. by S. A hamlet in the Haba to the right of the shore, which is here high and precipitously disrupt, owing to the narrow pass,

lies picturesquely. A quarter before two o'clock, N.W., on the right a little island. At two o'clock from N.E. to N.W. in the bend, but the Haba has disappeared. A quarter after two o'clock N.N.E.; on the right an island ten minutes long. At the end of it N.E.; on the left an old village containing tokuls with six to seven indentations on the roofs. The Haba, with several dhellèbs, has approached us on the avulsed high shore; it shews the genuine marks of the ancient or high shores. Half-past two o'clock, near the bend to N.W.; on the right many dhellèbs, which are not, however, of remarkable appearance, especially as the lower dry branches are upon them. A quarter before three o'clock. From the short E.N.E. tract to N.N.W. The forest on the right rises upon sandy deposits of downs, somewhat in the form of a hill. The sand was once deposited, perhaps, by an unusual inundation, on the underwood, and has remained there since that time. The shores are still intermixed with ochre here and there. A glistening long course before us towards N.N.W., such as we had not had for a long time, with the exception of the small inlets right and left; also a little island there. Thermometer 19° and 29° to 30° . Three o'clock. The Haba has retreated, yet N.N.W. On the left a small tokul village as before; immediately under it to the right E.N.E. and W.N.W., again a forest, the only break of the monotonous shores, islands, and villages. A quarter after three o'clock. From a short westerly direction to N.N.W. We halt at the right shore; perhaps Selim Capitan's vessel draws water—yet, no; the French gentlemen had not come up.

A quarter after four o'clock : off again, and we go N.E. On the right side Bohrs, and on the left Elliäbs. Half-past four o'clock, N.W. The Haba on the right rises on downs ; we see dome-palms also on it, but upon firm, dark earth, whilst the sand lies only on the surface. Moreover, these dome-palms are considerably higher than the dhellèbs. Violent storms cannot take place in these regions ; I have never seen a single tree torn up by the wind. A quarter before five o'clock, from N.E. to N.N.W. The Haba remains and consoles us more than sufficiently for the arid shore, although green reeds and weeds struggle up here and there, and strike the roots deep into the vivifying water.

To N.N.W., a long row of tokuls appears in parade before us, without any other background than the horizon. On the right a narrow arm goes to E., and places the barren tokul-city on an island. In the bend from N.W. to W. The tokuls have, in part, the screen mentioned before, as the entrance ; the sleeping-places in the neighbourhood are built of new reeds, and sixty tokuls without sleeping-places, and huts join them. This place, inhabited by Bohrs, is called Jemàhl. Immediately to the left also, by N.W., a tokul-village opposite ; the lower walls, being proportionably high, are partly plastered with Nile slime. The knowledge of my drogman Joi is already at an end : he does not know the name of this long village, lying on the margin of the river like a crescent. Five o'clock from S.W. to N.E. by N. I remark the circumference of a red cone of ashes in the centre part of the broken shore : the

reeds brush the vessel, and some of them fall on the plank before my window.

That custom of dung-fires for the encampment of the herds already mentioned, appears very ancient; for the earth deposited by the river lies from three to four feet high near them. About sunset we stop, on account of good neighbourhood, near a pastoral village on the right shore, where the river winds to N. The goats and sheep jump from the vessels with delight to the green grass on the shore. We hoped to get some oxen here, but not any were brought us.

CHAPTER VII.

THE BOHR "JOI."—HIS TREATMENT ON BOARD THE VESSEL.—HIS ESCAPE.—WOMEN'S VILLAGE.—FELT CAPS.—SONGS OF THE BOHRS.—TUBERS SIMILAR TO POTATOES.—THE BUNDURIÂLS.—THE TUTUIS AND KÈKS.—AN ELEPHANT ATTACKED AND KILLED.—TASTE OF THE FLESH OF THIS ANIMAL.—CHEATING OF THE NATIVES IN BARTER.—WINTER TOKULS OR WOMENS' HUTS.—MANNER OF MAKING A BURMA OR COOKING-VESSEL.—"BAUDA" AGAIN.—FEÏZULLA-CAPITAN'S INDUSTRY IN SEWING.—THE KÈKS LIVE BY FISHING.—DESCRIPTION OF THE WOMEN.—SERIOUS ACCIDENT TO THE VESSEL.—OSTRICHES AND APES.—FOGS ON THE WHITE STREAM.—WATCH-TOWERS.—SALE SHOOT A GIGANTIC CRANE.—IS PUNISHLL.—THE NUÈHRS.

17TH FEBRUARY.—The thermometer, hanging in the window, which is always open, had, at about half-past eight o'clock yesterday evening, $25\frac{1}{2}^{\circ}$, and this morning before sunrise 23° . The sky is cloudy, and it seems as if it would rain; the east wind abates the sultriness a little. At seven o'clock, from N.E. to E. by S., and immediately northerly. A quarter after seven o'clock, W.N.W., N.E., and then in a bend to N.N.W. The Bohr Joi was extremely happy yesterday evening; he had eaten so much that he could not move: I had repaired the broken bowl of his pipe, and he smoked my tobacco and said, "affat" (good). Feïzulla Capitan has given him the usual slave name of "Bachit," by which he is called and teased on all sides. The Dinkau Bachit, a young soldier, who might speak to him, will have

nothing to do with him ; therefore the fellow finds himself deserted, and cannot answer by words the crew, who are always laughing at him. Even yesterday he hung down his head the whole day, and looked on the ground, and I could not help feeling pity for the otherwise free negro, separated as he was from his friends. He had a handsome head, something of a Roman nose, large eyes, a mouth only protruding a little, and all his teeth, except the four lower ones ; in other respects he was thin, seemed in grief, and almost starved to death. This might have induced him perhaps to come on board Selim Capitan's vessel, who bound a piece of linen as an ornament round his neck, but retained him as a slave. Awakened from my sleep, I heard him speaking and singing, looking with passionate affection towards both shores. I think the poor creature is taking leave of his country, or he is home-sick, and owing to that cannot sleep. At midnight he woke me a second time, and screamed Bohr, Bohr, Bohr ! and then, Elliàb, Elliàb, Elliàb ! adding clearly thereto individual names, whilst he turned himself to those regions. He sang loud, melancholy songs, and what appeared from the melody to be the camel-song of the Bisharis, and then shouted wildly and loudly. They tried to hold him fast, but he was as strong as a lion. Subsequently he complained of pains in the body, which perhaps arose from his dreadful gluttony, and he gazed continually at the shores as if assistance would come to him from thence. I suppose that he wants to escape, and therefore I made him take off the linen decoration, as it might be an obstacle to him in so doing ; but I got him first to rub his stomach with it,

during which operation he roared and groaned like a wild beast, and stretched himself with both hands on the lowered mast. Scarcely, however, was he relieved from the attack of colic than he made a tremendous spring over the heads of the crew right away into the water. It was with difficulty that I prevented them from firing at him. Feizulla Capitan did not say a word, but put on a melancholy face, because he feared possibly Selim Capitan's reproaches.

Eight o'clock, N.N.W., and after fifteen minutes with a short course to S.S.E. and again N.W. and N.N.W. On the right, a village, with numerous light-coloured cows and open sleeping-places; between them, little huts for women and children, formed like a basket, plastered with slime, and covered at the top with entangled couch-grass, which may serve as a covering against the weather, or as a chimney. The north wind, which has set in, is contrary to us, and we are, at a quarter before nine o'clock, when we are going to the north, scarcely five minutes from the last villages. We continually run aground, and spin like a top from one shore to the other, on account of the north wind, which is blowing stronger and stronger: the ashes of the burnt grass are carried up by the wind, and the air all around is obscured by them. The river winds from N. towards N.E., and at the corner on the right is a large pastoral village, with several lowing herds; on the left, a tokul village, in which, on account of the north and east wind, we do not see any of the oval doors turned towards the Nile. A number of ugly and dirty women with leather aprons, also boys, but no girls, stand collected there. Above this women's village a gohr

disembogues from S.W. by S., and this is the same arm of the Nile that Selim Capitan navigated for three hours, above, near the Elliàbs, and found unfit for our voyage. We stop at half-past nine o'clock at the lower end of the long pastoral village extending along the shore. An old man seizes the rope by which we have lately been pulled, and makes us understand that he is going to kill some cows for us. We move on, however, for they did not come before eleven o'clock, to N.W.

The village is called Dirèk, also Aderèk. Three natives were on board our vessel: their felt morions were covered over and over with sea-shells (*Cypræa moneta*), and the inside so entwined with their hair, that they could not take them off without cutting off the hair itself; therefore we could not persuade any of them to sell us their caps. At last one man asked a large shellful of glass beads for it. Another fellow was brought to Selim Capitan, but he would not resign his morion for any price, and said that he purchased it for eight cows, and that it came from the very distant country of Kekèss. Hence it follows that there is a connection here with the sea. Eleven o'clock; a little to N.E. by N. A quarter after eleven o'clock, with a short bend to N.W. by W., and N. by E. In the angle of this second sharp bend, on the left a small pastoral village; then N.E. The reddish-colour of the ashes seems to arise from the natural admixture of the clayey soil, as I convinced myself to-day, when the men were piling together the dung of the herds. Half-past eleven o'clock. From N.E. to N.W.: then a Nile arm shews itself in the bend to E., and flows south-

erly. The smell of fire from the black and scorched shores is very unpleasant, on which, however, there are still green spots and tracts. The disrupt and higher old shore stretches to the right, in a straight line to N.N.E., whilst the present shore goes westerly. A quarter before twelve. In the bend from W.N.W. to N.E. by N.: on the left shore a pastoral village, with sleeping-places, or inclined reed-walls, turned towards W., and open at the top; small basket-huts and regular tokuls join, having roofs indented, or rather in the form of steps.

I cannot yet get the negro Joï out of my mind, with his melancholy melodies and Swiss home-sickness, which lasted for hours. The sudden, wild outbreak of the passionate feelings of man in a state of nature—the shouting of names, and the continual repetition of them dying away with the voice—never, never have I heard a more affecting *decrescendo*! Then again his rude speech and cries; and then the songs, which I took for pastoral songs, and which in part have the *very same melody*, with their softly humming and tremulous key-note as the camel-songs of the Bisharis, heard throughout the night in the desert, only that the former expressed the higher notes more passionately, where his voice often broke, but always returned again to the key-note. The calling individual names, by which his heart turned even to his enemies the Elliäbs, bringing to mind his misfortune in the dark cloudy night—every thing is still present before me. I offered him glass beads; staccato and hoarse notes alone were his answer. The Swiss style of singing is known in the interior of Africa, as I previously ascertained from hearing the young soldiers.

Twelve o'clock. From N.N.W. and N.W. by W. to N.W. The shores are no longer mixed with sand, although there are lower imbenchings and aggregations: on the left, a pastoral village, where we see, as usual, a crowd of negroes. At half-past twelve o'clock, N.N.W.: we halt at the right shore. They bring me small tubers, similar to potatoes, and eaten like them; opposite to us a pastoral village. We bear off again at a quarter before one o'clock. At one, from N. to N.W.: on the left, a village with old tokuls. A very long watercourse lies before us, and at the end of it, at two o'clock, a pastoral village, in the form of an arch, and extending to some distance. We double a short corner on the right, N.E. by N., near which we are regularly fixed, owing to the strong north wind, which blows the spray like drizzling rain. Thermometer, before sunrise 23° ; noon 28° ; now, at two o'clock, 25° . At four o'clock we leave this promontory, the wind having died away, and go N.N.E. and N. At a quarter before five the wind gets up afresh; we go N.W. to the right shore, where we shall remain perhaps the night. Thermometer, at four o'clock 25° , sunset 24° , at eight o'clock 22° .

18th February. Yesterday evening lightning, which seemed to proceed from distant regions. We might perhaps have heard the thunder, had not the everlasting noise, which, day and night, stuns us in the vessels, prevented us. The sky is quite clouded over, yet the sun penetrates through. I had scarcely stood ten minutes at the door of our cabin, before my clothes were quite damp, although no mist had visibly fallen. We find here many of the before-mentioned potato-like tubers, the foliage and tendrils being like those of

strawberries, but the leaf is not so rough. The tubers, which are yet small, are level with the ground, like those I had seen before, and I planted some specimens in sand. A quarter after six o'clock we bore off to N.E. to the great vexation of the crew, who were obliged to leave unslaughtered on the shore three beautiful oxen; then with a short bend to S.E. by W. and immediately W.N.W. On the left a pastoral village with lowing cattle, and before us a forest, veiled by a blue vapour, moves from the right side into the monotonous landscape. In the bend again to N.E. and N.N.E., where on the left is a pastoral village, but without herds.

I cannot imagine when the natives drive their cattle in and out; for I have at all times of the day seen the beasts tied up in the open air, near the villages, and I have never noticed any fodder. Our presence and their curiosity makes them, perhaps, careless in attending to them.

Half-past seven o'clock. N.N.W., and with a short course to E.N.E, where, on the left, a pastoral village lies behind the shore; then we turn sharply to N.W., where, on the left, another pastoral village appears; at this we wind to N.N.W. We have a gentle south-east wind, and are afraid of rain.

Eight o'clock. From N.N.W. to N.W., by N. Some tokuls, with more elevated tops, shew themselves on the right side, where the river immediately goes to the right; and at the same moment a row of tokuls of similar construction is discovered on the left, stretching in a falcated form along the shore. The old tokuls have grooved roofs, reed-walls from which the clay has fallen, oval doors, and some of them

with miserable reed-porches, and no sleeping-places. A pastoral village follows, belonging, perhaps, to this winter or women's village. The Elliäbs inhabit both these villages; but few of them shew themselves, and are called *Wiën*.

Half-past eight o'clock. From N.N.W. to N.N.E., and N. by W. Below, a large village opens before us, which the vessels a-head leave to the left. The island, which is merely young grass, floating on the river, only rises gently above the stream. A quarter before nine o'clock. At some distance from the right shore we see from the deck a large pastoral village. Nine o'clock. W.N.W. The forest previously remarked has not approached nearer to us. A quarter after nine, from S.S.W. to S.E., where the wind, for a short space, is contrary to us; then, on the right, to S.S.W.; but first we see two villages lying somewhat up the country on the right side. We go E.N.E.

The south-east wind has freshened splendidly, and the log gives five miles. The shores, although very low, are arid, and without cultivation. Right and left are lakes, and near to the one on the left a large village. Half-past nine o'clock; from E.N.E., a moment to W.N.W.; on the point to the right, where the river bends N.W. by W., an old tokul-village; on the left a lake, of half an hour long, which is an ancient river-bed, as perhaps most of them are; therefore the low shores divide them from us. A new forest before us, to which we perhaps shall come. W. by N.: on the left a wretched hamlet with mud-tokuls; but immediately afterwards a long row of regular tokuls, whilst below a broad gohr enters the

land about N.N.W., which makes, therefore, these huts an island-city. The people shout and bawl to us, as if we were old acquaintances: the ambak-trees are used here for pallisadoes and screens. But few people are seen, and these only old men and women. The island and village are both called Aquàk, and this is the last possession of the Bunduriàls. On the right shore the Tutuies follow, and the Keks on the left. About ten o'clock we stop below this city of the Bunduriàls. In the middle of the river a small island lies; level low country, with narrow pools, and behind it the Haba lie opposite to us, about half an hour distant. I despatch two servants to the village, to make some purchases, but the women seize large pieces of ambak-wood, and will not allow them to enter their harim city.

Half-past twelve o'clock, off again to N.E., and immediately on the right to E., where the violent east wind throws us, for amusement, on the left shore. One o'clock, N.W., then soon E.N.E., and a quarter before two, in the bend N.E. and N.N.W. From the deck, we perceive two villages on both sides. Two o'clock, N. by E., in the bend further to N.N.E.; on the left a pastoral village, then to the left N.W. How it delights my heart to think that the favourable south-east wind brings me every moment nearer to Khartùm—to my brother! Half-past two, N. and N.W. by N.: a pastoral village at the left; a quarter before three, N. by N.E., and round the left to N.W. Three tokul villages in the country to the left. Three o'clock, W.; on the left shore a pastoral village; before us, in the distance, a forest. From the deck, I see behind the last-named village

another pastoral one. A quarter after three o'clock, with a short bend to N.N.W., where a black tokul village, behind the shadow of heavy clouds, looks like an old castle with several pinnacles, until the latter disappear, and a row of forty-five tokuls is formed. A small gohr enters below to N.N.W., which, as seen from the deck, widens, and has a tokul-village in its neighbourhood. Another little gohr to the left, from N. to N.E., connected with the preceding one, leads probably to a lake, for the left shore hardly rises above the river. The right and blackened shore is also scarcely four feet high. A quarter before four o'clock, from N.W., in a bend along reeds standing in water, which, being slightly rustled by the south-east wind, strike leaves and sprout, such as I have not seen for a long time : to N. where a long shining road extends before us. On the right two islets, verdant like the new-born low country of the right shore; another larger island joins the second for a few paces, and a fresh one is united to it close to the shore, which appears here again to be scorched. On the left some other green bushes of reeds are standing, and behind them, we perceive from the deck a tokul-village. Four o'clock; from N.W. to W. by N.; on the left a pastoral village, and then N.N.W. The forest, about an hour distant from the left shore, where a pastoral hamlet stands, stretches from S. to W. To my joy, young reeds extend from the right corner, in a long bend with the river to N.E.

Half-past four o'clock, again in a long bend from N.E. to N.N.E., N. and N.W. to W.S.W., where we stop at five o'clock at the right shore. A large lake lies at our side; behind it, another one is incredibly

enlivened by millions of birds, amongst which there are several pelicans. I have never heard such a noise and fluttering of flying birds, as I did here when on a shooting excursion. Thermometer, before sunrise, 20°; noon, 27°; three o'clock, 29°; eight o'clock in the evening, 24°.

19th *February*.—We navigate, at seven o'clock, from N. on the right, to N.E., and have soon to contend with a contrary north wind. On the left we remark two of the narrow gohrs or natural canals, serving, at high water, as channels to the lakes, from which they are now disconnected. On the right, as yesterday at noon, Tutuies; on the left, Kèks. A quarter before eight o'clock. From N. to E. Here and there we see the negroes holding a stick, covered with a skin of long hair, which appears to be a battle-standard; they carry it always erect when they return from war.

Eight o'clock. N.W. On the left a long tokul-village of the Kèks, with ambak-hedges, instead of the solitary little court-yards of the houses; the sleeping-places open above, and plastered below. We no longer perceive magazines erected on stakes: the people here never seem to think of the morrow. On all sides uncultivated soil, and that has been the case for some time. Nature must provide the necessary bread-corn and other fruits, without any exertion of men, or the people must live principally on the produce of the chase, and fishing.

Half-past eight o'clock. From N.W., with a short bend to S.E., yet only for a few paces; then again right round to N.N.W. We do not remark that the water has fallen; it seems to be in its usual shal-

low state. Young grass in the water at all the corners of the river or shores, and also to the right of our bend. The marsh-regions, with their noxious moisture and numerous glow-worms, are close to us. Yesterday evening, the hollow sound of the drum foreboded their approach.

Nine o'clock. To N.N.W. On the left a Haba, a quarter of an hour distant. A quarter after nine o'clock. N.E.; and immediately we double a flat green corner in the bend to S.W., and a very short tract S., where there is a narrow pass. Half-past nine o'clock. N.E. On the left a wretched hamlet, and a large lake in its neighbourhood, with numerous birds, separated only a few paces from us. Ten o'clock, N.; and to the left, round a green half-moon, to W.S.W. Half-past ten o'clock. Again round a verdant margin of the shore to the right, N.W. A quarter of an hour later we halt about N.E.; and I accept Suliman Kashéf's invitation to dinner. To my joy he talks a good deal of my brother. The Kèks have brought some more teeth; but not one fell to my lot, in spite of all my endeavours. About half-past one o'clock, we bear off again to N. and N.E. The Elliàbs possess here also a tract, and likewise the Kèks; the Tutuis dwell more up the country. Half-past one o'clock, W.S.W.; then shortly S.W., and a quarter before two, to W., where the Haba below seems to be close to the shore, and on the left side it is scarcely half an hour distant; on the right a pastoral village.

Two o'clock, N.W. by W. On the right bank some men are employed constructing a miserable pastoral village on old red ashes; behind I see refreshing

green grass, but that on the shore is either dried up or burnt away. A second pastoral village is being erected immediately on the right; the commencement of it consists here of solitary sleeping-places: stakes, and heaps of ashes are lying about in large quantities. The pasture seems to be a dried-up marsh-lake, as our landing-place in the middle of the day also was, where gazelles and elephants were sporting in the high grass on the still moist ground; but I could not even get a shot at the former. A quarter after two o'clock. On the left withered ambak, and the neighbouring forest seems to approach to the shore; on the right a pastoral village, and a long tokul-village joining it, with and without porches. Sale jumped to my window, and shouted "Kawagi! tali barre, shuf uachet fill fok el bah'r"! ("Master, come out, and look at an elephant on the shore!") "*Kawagi*," properly speaking, being merchant, and the title for every Frank; "*fok el bah'r*" means literally, over the river. And the whole crew were all upon the move to see the elephant. I went up also on the deck of our cabin, and perceived the dark-grey monster, throwing first his trunk on the earth, and sending up clouds of dust, and then lashing his body with it. A semicircle of negroes were gradually approaching him, having spears in their hands; but they fled from us, their best friends, when we landed. Suliman Kashef soon opened a platoon fire, and I repaired immediately with Sale in the direction of the elephant, who was looking around and preparing to attack the crowd of people. The balls seldom whistled by him, for the mark presented two large a volume to miss; and the distance, short

as it was, was diminished to a few steps by the bloodthirsty circle surrounding him.

He extended his ears up and down like the opening of an umbrella, not so much from pain, as from the balls raining on them, and sticking in the ear-laps, as we found afterwards, having only penetrated one skin. He was already blinded by the shots, for in elephant-hunts they first aim at the eyes, and few missed, or else he would have made his way to the Nile by instinct, to preserve himself for a time. Suliman Kashef knelt down and sent another rifle-ball at his orbits; he fell—the men rushed at him, but he rose once more, when they all started back, tumbling one over the other to escape being trodden under his feet. At last he sat on his hind-quarters, stretched forth his fore-feet, and died in this half-standing posture. I could not have shot him myself so close, for the blood running from his eyes and numerous wounds moved my compassion too much to do so; even Sale said to me, in a melancholy tone, “El messkin!” (the poor creature). I ordered him to cut off the animal’s tail; for the Kèks, to whom Suliman Kashef had presented the flesh, as a set-off for the beautiful teeth, had already buried their knives in his body. Sale hesitated a moment, because the awful sight of the beast made him fear that it might possibly stand up again. Seven spear-heads were found in the flesh under his skin, and he had swam over with these sticking in him, from the opposite shore, where he was first hunted. I had already embarked, when it struck me that the foot of an elephant was considered a dainty, and I sent, therefore, a servant to fetch me one; but he brought instead a large piece of

the ear, as a proof that he had really gone back, for the people of this country seem to know what is good as well as the Europeans at the Cape of Good Hope. Our black soldiers, however, had brought flesh on board, which I afterwards tasted, but did not find very relishing.

A quarter after five o'clock we leave the spot, and navigate to N.W. by N. On the right a small encampment for cowherds; on the left burning reed-straw. The leaves of the elephant-tree, which I had placed in my window, have withered since the morning, though from the 6th instant, therefore for thirteen days, they had been exposed to the sun and air, and had



MOUNT KOREK

MOUNTAIN CHAIN OF
KAGELU

MOUNT KONNORIT

COUNTRY ON THE LEFT SHORE OF THE NILE FROM THE ISLAND OF
TSHANKER TOWARDS WEST. 27TH JANUARY, 1841.

not only remained fresh and green, but also seemed to shoot forth vigorously, and even to grow, whilst the fruits became every day more and more shrivelled. The juice of the latter might, perhaps, have nourished the leaves by returning to them; the stalk between the wood and the leaves being injured by the wind blowing it against a nail, shewed plainly that it had lost its sucker. A quarter before six o'clock, N. by

W.; close to the left a large lake; on the right a reed fire. We wheel here on the left to the W.; the surface of the earth is very low on the right and left; the lakes, therefore, are not all dry, but considerable rain must fall to make them overflow, unless they have auxiliary canals from the river. A tokul-village before us to the W., near which we shall perhaps stop, in consequence of the horizontal smoke, and the smell of the meat connected therewith. A floating island is at our side; the elephant may have torn it from the shore in crossing. Six o'clock, W.S.W.; we ride at anchor in the middle of the river, and have the village at our right. Thermometer, before sunrise, 19° ; noon, 27° ; one o'clock, 28° ; two o'clock $30''$; eight o'clock in the evening, 25° .

20th February.—At 8 o'clock we navigate N.W.N. then N.N.W. A quarter after eight o'clock. N.W. by W. We sail with a faint north-east wind: to the right a pastoral village, to the left the Haba, nearly a quarter of an hour distant; the shores low; then N.W. by N., and again in the bend on the green margin of reeds to N., and on the left to W.N.W. Nine o'clock. We stop at the left shore, for the strong north-east wind is contrary to us in our course from N. to N.N.E. Five o'clock. The whole day I have been in bed, for I became so ill this morning, shortly after our departure, that I could not sit upright, and therefore I wished very much for wind and rest.

It is difficult to bargain with the blacks: they take the glass beads, and the barter seems closed; but they immediately seize the goods which they have already given us, and require more sug-sug.

The following circumstance happened to me, when I was a short distance from the vessel with one of my servants. I had bought a large elephant's tooth, and a chief refused not only to return the beads, but even tried, with his men, to take away the tooth from my lusty cook, Sale Mohammed, by force, and to sell it again; whereupon I got angry, and struck him on the face with the flat part of my hand: he stood as if petrified, but afterwards went away without laying a hand on me.

Although the wind is still contrary, we navigate, immediately after five o'clock, with libāhn, to N.N.E. by the right shore. The real cause of our departure arose from Thibaut having gone ahead, to purchase ivory, which the Turks will not permit. We work to N. till a quarter before six, and in a bend to W., where on the right is a smoking pastoral village, with several small plastered summer tokuls. We sail delightfully from N.W., to N.N.W., the wind being favourable. A short tract to the left S.S.E. and then immediately to the right, N.N.W. We see again vessels surrounded by reeds, where we could not have supposed them to be. The river here seems to take delight in tedious and disagreeable bends. We halt after sunset at the right low shore, where, at some distance, I perceive an ambak thicket; but I am too weak to fetch seeds, and my men immediately jumped ashore with gun in hand. Thermometer, at sunset 27°; noon 29° to 30°; sunset 27°.

21st *February*.—Half-past seven o'clock. From N.W. to N. and N.W. by N.: on the right a considerable pastoral village with larger tokuls, and plastered sleeping-places; the latter slightly diminishing

towards the top. Saw men stand near these summer tokuls, the roof of which rises only a little, and on the average, their heads are of an equal height with the tops of their huts, and some even tower above them. We stop at a quarter before eight o'clock between this pastoral and the succeeding women's village, where the river flows northerly, and wait for cattle to be killed. The Kèks dwell on both shores, and the Tutuis up the country on the right side, who live at peace with the former.

The winter-tokuls, or women's huts, appear from the river far higher than they really are, for they mostly stand on the slightly elevated margin of the shore. After repeatedly measuring them, I find that they are from eight to eleven feet high, including the lower walls, which are always from three to three feet and a half. The roof is in from five to nine uniform grooves, for the straw is not sufficient for the length of the roof. The small tokuls of the pastoral villages are, on the average, from six to seven feet high, including their walls, which are four feet, or something more; those of the sleeping-places are as high as the reeds themselves, namely, about ten feet. To the great diversion of the crew, a young woman here also wanted to drive us to the right side, because our vessel lay at anchor before her harim.

I watched a friendly-looking woman making a *burma* (or cooking apparatus), and putting the finishing stroke to it: she rounded the outside of the earthen pot with water, and to get the little hoops on it, she had a thick, strongly-twisted piece of pack-thread, of a span in length, which she rolled over the smoothed places. As far as I could learn from her,

these vessels are made merely by hand, although it might be supposed, from the beautiful large vessels of the Shilluks, that a potter's wheel was used. The people here display as little friendly feeling towards us as those yesterday. I manage to get, however, a thick fluted hassaia of ebony, besides some small elephants' teeth.

Ten o'clock. At last a miserable cow was presented to us, and we proceed W.N.W., a quarter of an hour later, S.W., although only for a very short tract, and immediately N.N.W. We continue to have on the left, green reeds in the water; and the shore on the right is scarcely two feet high.

Eleven o'clock. From N.W. to N.; in half an hour from S.E. and N.E., with a short bend in W.N.W. to S.S.W.; then on the right a short tract N.E. by N., and again N.N.W. The shores are scarcely elevated above the river, and therefore numerous lakes must be formed. I remarked, yesterday, crown-rushes (*papyrus antiquorum*), which were still green, as well as ambak-thickets, seeds of which plant I took this morning; its leaves were already brown, and the tree itself in a dying state: there were not any young shoots from the roots to be seen, nor from the seed that had fallen in the preceding year; the latter lies therefore a year, and perhaps till the next rainy season, in the ground, and then during the time of high water, springs up with incredible vigour to that height, which, upon this slightly elevated ground, was only twenty feet; but in our ascent I remarked it double that height on a low island in the river. Twelve o'clock. From N., to the left N.W. On the right a pastoral village, and immediately right

to N. in a bend. The river is narrow, for the grass has grown into it.

“ Baùda, baùda ! ” the crew screamed the day before yesterday,—a dreadful word, in truth. Hitherto we have only seen a few of these horrible mosquitoes, but in their stead a quantity of other stinging insects. From N. immediately to the left, W.N.W. and a short tract N.W. by N. The north wind has been long contrary to us, but has not been particularly prejudicial to our voyage. Half-past twelve —From N.W. to W.N.W. and W ; for a moment N., and in a short bend to S.S.W., where it winds to W. One o’clock.—About N. ; a broad arm of the Nile flows to W. We halt for a moment here by the island. About S.E. by S., the mouth of another gohr going from E. is seen ; it discharges itself partly into the main stream to W , and partly flows to S.W., and forms another island. The careless sailors have allowed the vessels to be thrown into this arm of the Nile, and are now working to come to the W. into the main river.

Half-past one. From W.N.W. left to S. Little ambak-woods on all sides, but not having their fresh verdure ; also crown-rushes, seeds of which I have not yet been able to procure. A quarter before two. From S. and S.W. to the right, shortly round to N.N.W. and on to N.E. Two. From N.E. to the left round to N.N.W., then to the right a few paces to N. A quarter after two. From N. and N. by E. : on the right some negroes, who remain in a very quiet posture ; to the left W.N.W. Half-past two. W. by S., where we have a tolerably long road before us, then W.S.W. ; on the right a small summer village. A

quarter of an hour later N.E. by E. and N., and so in a bend further to N.E. Three o'clock. From N.N.E. to N.N.W.; the low shores or young water-reeds and ambak thickets still continue. We see even now several reed-fires, but the people appear, since our absence, to have burned the reeds very well, for a quantity of green grass is seen sprouting up from the scorched soil. On again in a long bend to W.S.W.; on the right a pastoral village with little tokuls, having roofs more pointed; on the left also a similar one; then at four o'clock, opposite the bend in N.W. at a little distance, a large lake, and behind it the Haba. The natives sing a little, but remain quietly sitting. A quarter after four, from N.N.W. to the left towards W., then with a short bend to the right N.N.E.; at this sharp corner a small pastoral village, near which we halt at the right shore. About south from our landing-place a large lake, where the river winds from N. to N.N.W. on the left shore immediately behind the green reeds. The natives have all fled except one, who remains close to us; probably the fame of our love for slaves has preceded us. Thermometer, before sunrise 20° ; noon and afternoon 28° to 30° ; sunset 28° ; eight o'clock 26° .

22nd February.—We have waited since yesterday evening in vain for Selim Capitan and Arnaud, who have struck into another arm of the river. At nine o'clock this morning we see their mast at a distance: they came up and we started at ten o'clock from hence, where a large summer village is in the course of erection. We row strenuously, for the north wind is contrary. From N. to N.N.E., and at half-past ten to N. and N.N.E., and immediately to W.N.W.

A quarter before eleven E.N.E., and immediately N.N.W. Feizulla Capitan had epileptic attacks to-night again, perhaps arising from the tension of the nerves of his fingers, for he has fabricated a tow-rope for Suliman Kashef, and worked at it till late at night, as he has done previously when engaged in sewing.

Eleven o'clock. From N.N.W. to N.N.E. ; an arm of the Nile flows in on the right—the very same one navigated by Selim Capitan and Arnaud. To the right a pastoral village on the head-land ; we put into land near it. Two o'clock ; we leave the place, for the natives will not approach us. From N.N.W. immediately to N.N.E., and a quarter of an hour later with a short curve to N.W. The negroes here wear only narrow ivory rings. From N.W. to N.N.W., and at half-past two, from N. in N.E. by E., to E. by N. The shores are either a green margin of grass, encroaching on the water, or if they be dry, about two feet high, and behind them are ambak-thickets, or crown-rushes, striking leaves, or dying away, according as they are in low or high ground. Three o'clock ; further on in the bend to W.S.W., and again round the right to W. and N.W. by W. There is not a man, house, hut, or cattle in these marshy regions, from which I myself shall only be too glad to escape. A quarter after three o'clock, N.N.W. ; to the right a pastoral village : we really see human beings, but they appear very listless, and even the women remain quietly standing amongst them. Opposite, another village ; also negroes, but no herds. Half-past three, N. ; on the right a pastoral village. We proceed slowly N. by S., and

N. by W., yet generally N.; and a quarter before four, N.N.E. Here and there still there are floating islands; with a short bend N.W., and N.W. by W. to W.N.W. On the right a lake; and at four o'clock in a gentle bend to N.N.W., then round a corner, N.N.E., and E. by S. but immediately again W.N.W. to S. by W. Half-past four, W.S.W; on the right a pastoral village smoking vigorously, yet we do not see any herds. A quarter before five, from S. by W., shortly round N.N.W. to N., and to the left in N.W. At five o'clock again to the right, N.N.W.; on the left hand a pastoral village, from N.E., immediately N.N.E., N., and N.W.; in a bend further on to S.S.W. Half-past five, from S.S.W. in W., W.S.W., where a small pastoral village appears on the right, to N.W.

For some days we have been without fowls and sheep on our vessels, and we shall not, perhaps, procure any meat till we arrive at the so-called, "Caannon place," where the eighteen Nubas of Darfur sought their way to freedom with only six guns. A quarter before six o'clock from N.W., shortly round to W., and in a bend to S. and S.E. by S. Six, S., and immediately in W.N.W to N., from whence we navigate to the left round a corner. After six o'clock, in a bend to S., and here again round a neck of land immediately to N. Some trees, harbingers of a finer country, have shewn themselves just now. A large lake secluded by palings, and perhaps, therefore, subsequently furnishing the natives with fish, is noticed at about fifty paces up the right shore. Here we make for land. Thermometer, before sunrise 17°, noon 29 to 30°

23rd February.—We navigated this morning to the left shore, whereon there is a scanty Haba, in order to fetch wood and make observations. I walked to the neighbouring Haba, where I saw men in nine fishing-boats, catching fish. The lake is from forty to fifty paces in the low ground, where it stands on an equal level with the Nile, and enclosed with am-bak hedges, from W. to S.E. It is a remnant of the primitive bed of the stream, perhaps itself a river-bed lately deserted, and surrounded on one side by the old shores of the Haba, which are here only five to six feet above the water, and form also the ancient left shore. From what I could see, it is about three to three and a half hours' long, by two hundred to three hundred paces broad. It seems to derive its water from the river, and to fill with the latter, but also to supply a mass of water to it in the rainy season. It winds to S.S.E. and appears to go still further eastward.

The Kèks live here very comfortably, merely on the fish they catch; but with the exception of that, they are very poor. Yet they came as proudly to us with two goats as if they had brought twenty fat oxen. They do not seem to possess cows at all, and they may be perhaps the Icthyophagi of the enclosed lake. However, we got seven elephants' teeth, the value of which they apparently did not know, by the assistance of our interpreter. The Kèk women let the hair grow a little: the lines on their forehead extend to behind their ears; but they are fine, and frequently invisible on account of the dirt.

Front and back aprons, as usual; at times, however, we see the little rahàt, or even the leathern apron over the rahàt, clearly a luxury, which the wife of

Làkono also indulged in. Besides this, these women have a very *charming* appearance owing to their chewing tobacco. There is another couple of poor villages in the neighbourhood of this place, and the men are said to have fled from it, taking their oxen with them. A quarter before five o'clock we navigate at last to the north: the Haba retreats immediately to a distance. On the right a little pastoral village, from whence we receive the two goats mentioned above. A quarter after five, to the left, N.W. by W., where there is a Haba; soon afterwards to the right N.N.W. The higher shores have disappeared with the Haba. The whole surface is scarcely two feet above the river. On the right young reeds and reed-grass.

At this moment our vessel received from below a tremendous shock: the crew cry "Chamùss, chamàss!" and laugh; but they very soon put on a serious countenance, for the bottom of the vessel was already full of water. The barrels of gunpowder, grape-shot, and cartridge-boxes were taken out, five signals of distress having been first fired; and they were about to continue firing blank shot, for the water rushed in as if a leak were sprung, when the bold reïs Abdullah, a Kenùss (the reïs are generally all Kenùss, because they are well acquainted with the cataracts), went under the vessel with a ball of tow: this took place close to the shore, to which we were not able to approach within ten paces, and where there was still great depth and danger. The hole, however, was stopped by the brave and incessant exertions of some sailors and soldiers. I myself put out the fire on the hearth, and forbade smoking under the threat of instantly shooting any one who did so; for I was to act,

in the absence of Feizulla Capitan, as wokil : and at the same time I posted sentinels. The vessels sailing a-head did not stop at the signals we fired, although they were near enough to hear them ; and we ourselves, then, at half-past six o'clock, navigated to N.N.W. Subsequently we go to the left, W.S.W., then to the right, where we halt, together with the other vessels, immediately in the bend at the left shore, at a former landing-place (matrag betal mutfa), after we had jostled our beak-heads together in the usual unskilful manner.

24th February.—Our vessel has a large hole, and we are obliged to be drawn by the prow upon the sand : all the goods were removed, but afterwards safely put on board. Sabatier makes the observations now, and Arnaud is said to be employed with the calculations, for which, therefore, we shall have to wait a long time. Several ostriches were seen yesterday by my servants and Suliman Kashef's body-guard, without a single well-flavoured leg falling to our lot : they had remarked, also, an ape the size of a large dog. I asked whether it was a chirt, which species answers to our zoological ideas of the cynocephalus and cercopithecus ; but they assured me that it was an abelðnk, because it had a small head.

25th February.—A quarter before seven o'clock, to N.N.E., and slowly, N.E. by E. The thermometer, since three in the morning, at sunrise, has been but 17° ; and did not rise from noon to three o'clock, above 29°. In the evening we see the sun disappearing in the dense atmosphere, which lies heavily on the whole of this country ; and this morning it rose either from behind the mist, or

covered with clouds. The evaporation from the neighbouring stagnant waters has an injurious effect upon the health of the crew, and consequently they are nearly all afflicted with a violent cough. The difference between this region and the clear mountain air and pure water of Bari is very great. The fogs here are seldom so thick as in Germany or England: but they penetrate through the skin, which has become sensitive from the heat, as, for example, this morning.

Seven o'clock.—N.N.W. On the left hand a large lake, close to us, in the green reeds, connected perhaps with the river, and indisputably an ancient bed of the river, cutting off the corner to the left, which we shall hereafter double. Half-past seven o'clock. N.W. We go till half-past eight o'clock in a northerly direction, and halt in N.N.W. at the scorched right shore. This is here six feet high, whilst, a hundred paces up the Nile, behind the young water-reeds, no elevation of the shores is observed. We remark no strata of earth on our shore, but clay and humus are closely mixed. At nine o'clock we navigate further, without the lust of our crew for meat being gratified, for the people seem to have driven away their goats, and they have nothing else. N.N.E. The north-east wind slightly retards our course. Half-past nine o'clock in a bend round the green couch-grass, N N.W.; a short tract N.W. by W., and round the right to N.E., rowing strenuously; then, at a quarter before ten, to N.N.E. The wind becomes stronger, and all the singing in the world will not help us, if the river do not take a contrary direction, of which there is some appearance.

Ten o'clock. N.N.W. We sail five miles. N.W. and W.N.W. A quarter after ten o'clock from W.N.W. in N. by W., where we were obliged, unfortunately, to furl the sails. Immediately beyond N. to N.N.E. Half past ten, N.N.W.; a quarter of an hour afterwards W., and round a short, verdant grass corner, from E.N.E. to E.S.E.

The ants are of the greatest service here, for they throw up the hills, which serve the people as watch-towers, from which they look for their strayed friends and cattle. Half-past eleven o'clock. W., and immediately, in a short tract, to N.N.E., and also to N.N.W., and directly again to the right—slowly, owing to the contrary wind. At twelve, N.E. by E. and E., where we halt at the right shore of the reeds, to wait for Selim Capitan. Two o'clock.—Set off to S.S.E. My men bring me three short-haired sheep in the sandal—a thing now seldom met with—and a motley, decorated gourd-shell. A quarter after two. From E. to the left, a short way to N.N.W., and again to the right N.N.E.; also, at half-past two, a few paces to N. by W. and N.N.E. Immediately round a sharp grass-corner S.S.E.; then, a quarter before three, in the bend beyond E. and N. to N.W. by W.; on the right, up the country, a large village, and W.S.W.; again a village in the neighbourhood. The river winds to the right, W. We have hoisted already our fore and after-sail, as if we had to go again N.E. with a contrary wind. In the bend to N.N.W., on the right, a village upon a little hill, which I sketched; then N. Half-past three. At the right a gohr, going to E., and then S. N.W. We halt immediately at the right shore.

26th February.—Departure at half-past eight o'clock, N.N.W. My three sheep, which were in the meadow on the shore, ran away whilst my men were cutting reeds, from which Venetian blinds are said to be made in Khartûm. We sail with a south-west wind, and make five miles. A quarter before nine o'clock, from N.W. to N.N.W. and W.N.W.; again to N.W. Nine o'clock N., a small tract to N.E., and in the bend shortly to N., when the sails are reefed. Half-past nine.—From W.S.W., for a short time in W. N.W. and N.; some large hippopotami shew themselves, and we begin now to fear for the vessel. We sail with five miles' rapidity. A quarter before ten o'clock, N.N.E. Some negroes have just come to the left shore,—ashes their ornaments, ashes their clothing. Ten o'clock.—For a moment to S.W. by W., and shortly round the green corner of the right shore to N.N.W. This winding costs some trouble, for the wind blows the vessel right round. Half-past ten, W.N.W.—Ambak being still green as it nearly always is in this Holland kind of country, covers all the right side at a slight distance from the shore: in a little bend to N.N.W., then round an obtuse corner, W. by S. A quarter before eleven W., and in a wide bend to E. Eleven. Likewise from E. to N.W., then W.N.W. The shores are generally elevated only two feet above the water, wherein a grass margin intrudes; behind, every thing is burnt away, and therefore the ambaks are withered, unless they stand in a protecting marsh. A quarter before twelve.—N.W. on the left hand, a large and long-scattered village on a high tract, and a little upwards a considerable lake, with a similar village,

connected with the Nile by a ditch. Natives squat on the shore and hold up their hands. Twelve o'clock. To N. A quarter after twelve from N. by E., in a bend N.W. The lakes, which I generally take to be old beds of the river, retaining water even in the dry season, are a proof that the primitive stream has gone far deeper, and that even the present bed of the river, with which they are partly connected, must have risen as well as the whole country; because, had it been otherwise, they would have ebbed away. Half past twelve.—From N.W. to N., N.N.E. and E. One o'clock.—S.E. in an arch to N., and round a little corner to N.W.; on the right a tokul-village. Half-past one o'clock N., and a quarter before two N.N.E., then on the left to W.S.W., and on the right to N.N.W. and N. by E.; at two o'clock further to N.N.E. and N.E. by E. A quarter after two, N.W. by N.; on the right a broad river arm coming from S.S.E. From the mast they tell me that it is a gohr cul-de-sac, and therefore an ancient bed of the stream filled up from below. We halt at the right shore, for Arnaud wants to survey it; but he lies down to sleep, and we bear off again without having effected our object. At a quarter after three, N.N.W., and directly round the right, E.N.E.; to the left a little W., and then N.N.W. and N.N.E. Four o'clock.—Again N.N.W. and W.S.W. The wind ceased even at noon; it had been of little service to us. The floating islands of creepers are still the order of the day; but not so large and numerous as in our ascent.

A quarter after four, W.N.W., in a flat arch to N. by W. The north wind having now set in delays us

exceedingly. Five o'clock, N N.E., a long road before us. We go at six o'clock to the right shore, where the river winds N.N.W. I go upon deck, but feel so enervated by continually sitting, that I do not venture into the half-burnt high grass on the shore, where our sentinels, as usual, have their posts on the ant-hills, as a measure of precaution against the desertion of the soldiers, as well as any sudden attack of the natives. Thermometer at sunrise, 17° ; noon, 29° ; without getting up any higher.

27th February.—At half-past seven we set ourselves in motion to N.N.W., and soon N.W. Not a negro is to be seen here: the country appears, even at a distance, to have no population or settlement. Perhaps Nature thinks fit to give a long preparation to these regions, in order to elevate the alluvial deposits for the habitation of man, and to form the stream territory, and thus to realise the principles of humidity; or all this land is subject to a deluge, and tracts, which are now deserts, have become dry. Truly it might be the work of thousands of years to dry up an inland sea, such as that between the mountain terrace of Fàzogl, and the mountains of Kordofan, towards the sources of the White Stream,—to extend it, with unknown ramifications, through the mountains of Bari to Habesch and Darfur, or Fertit, &c., and at last to break down at the Nile valley, near Khartùm, those barriers which display themselves there in solitary rocky hills and mountains. Eight o'clock, from N.W. by N. with a fair south-westerly wind to W. A quarter after eight, W.N.W.; the wind freshens, and we make six miles. Half-past eight, in a bend to N., and further to S.E. A

quarter before nine o'clock to N.W., and on to N.N.W.: on the right an isolated dhellèb in the reeds. Nine o'clock, in a flat arch again to N. by E.: on the right a village, with extremely low tokuls. On the left we remark another elephant-tree, and at a quarter of an hour distant, on the right, a forest. A quarter after nine o'clock.—N. by W. and E.: on the right a lake, with a village, at a short distance from the shore. The lake cuts off, near the Haba, that large angle formed by the river, and belonging therefore to the primitive bed. The poison-trees make me recognise that scanty forest where we landed previously. With a sharp turn from E. over N. to W. by S., and immediately at half-past nine o'clock, W.N.W., and further round an arch of reeds in narrow water to E.N.E., where we stumble again upon the Haba. A quarter before ten, we double a corner N.W. by N., and in a flat arch to W.; seven miles.

We land at the right shore near the solitary stunted trunks of trees, which belong to a former forest. In the neighbourhood a large lake. A little after ten, again from thence, N. by W., N. by E. to N.E. A quarter after ten, to N., and then E. by N. Some fishermen's tokuls to the left on the low shore: neither men nor periàguas to be seen, the former having probably fled. A quarter before eleven o'clock, from E. to N.N.W. Eleven o'clock, to N. and N.N.E. Unfortunately the wind has slightly slackened, yet we still make four miles. A quarter after eleven, E., then to N. Half-past eleven, N.W.; further W., when our sailing ends for some time, to W.S.W. A quarter before twelve, from W.S.W. to N.W., when we sail again, and N. to N.E. by E.

On the left, some negroes in the reeds, who speak to us, but we do not understand them. N.N.E., and immediately N. by E., and E. by S.; on the left a miserable fishing-hamlet.

Twelve o'clock.—Round the left, in the bend, N., and further to W.N.W., where a long water-tract lies before us. Half-past twelve: N.W. from S., a broad gohr comes on the left of us, by which the river is considerably widened. To N. and N.E., then N. by E.; and a quarter before one o'clock, to the right, E.N.E., and directly to the left, in the bend, N. and N.W. Half-past one, N.N.E. to E. then N. by E. to N.W. by W. A quarter after two, N.N.W., and N. to W. by N., and again to N.N.W., and N.W. by N. Half-past two, N.N.E. and with a short turn, a quarter before three, to W., and on to W.S.W. On the left a large lake; then N.W. and N., and in the bend, to S.E. by E.; gradually again to E.N.E. Half-past three, N.N.W., where we stop at the scorched right shore. Subsequently we go to the left, where the reeds are protected a little from the wind. Wonderful to relate, I got in such a perspiration by bathing in the Nile, although at first I could not move after it, that I was obliged to fly away from the cold wind to the cabin, and even there to wrap myself up in the barakàn (Herahn) folded four times thick.

28th *February*.—At a quarter before eight, we navigate from N.N.W. to N. On the right, several solitary large tokuls are to be seen from the deck, and then N.N.W. Sale brought a crane of gigantic size; but he had kept our vessel waiting for him half an hour, although only this morning I had enjoined

him to be attentive to the roll of the drum, and the sails. To awaken his sense of discipline, and as a warning for the negligent soldiers, I got Feizulla Capitan to give him some stripes over the hand, sparing him by this means the disgrace of receiving this slight punishment from a subordinate officer.

Eight o'clock.—N. W. A quarter of an hour later, from N.N.W. to W.N.W. It blows a gentle south-west wind; but we are obliged still to make use of the oars. Half-past eight o'clock.—From W.N.W., to N.N.W. and E. The air is thick, like yesterday; a heavy dew falls, and neither sunrise nor sunset is perceived. A quarter after nine o'clock.—From E., round the left, to W.N.W., where a large scattered tokul-village lies on the right, and behind it a lake. The Nuðhrs dwell here, and some of them come to Selim Capitan, when he halts at the right shore, which they did not do on our ascent. We proceed in a flat arch to N.E. The wind has freshened a little, and the oars rest; we make five miles. A quarter before ten o'clock, from N.N.E. to W. Ten o'clock, with a short turn, to N.N.E. A quarter after ten, in a small bend, to W.S.W., where we are obliged, unfortunately, to furl the sails, to S. by E. A quarter before eleven.—Shortly round to S.W. and S.S.W. Eleven.—To the right; very shortly round to W.N.W., and the sails spread, to the joy of all who wish to push forward and see their friends; but directly again to the left, S.; on the right, hamlets, with men. A quarter after eleven. At the left a small lake in the river, formed by other tributaries. We go W.N.W., and land at the left shore.

CHAPTER VIII.

NUÈHRS.—ORNAMENTS—MANNERS OF THE WOMEN.—THE MEN.—CURIOUS CUSTOM OF DRESSING THE HAIR, AND STAINING THEMSELVES.—VISIT OF A CHIEF.—SPEARS USED INSTEAD OF KNIVES.—SINGULAR WAY OF MAKING ATONEMENT, ETC.—WE HEAR ACCOUNTS OF OUR BLACK DESERTERS.—BOWS AND QUIVERS SIMILAR TO THOSE REPRESENTED IN THE HIEROGLYPHICS.—THE TURKS INDULGENT IN ONE RESPECT.—MOUNT TICKEM OR MORRE.—TRACES OF ANIMAL-WORSHIP AMONG THE NUÈHRS.—ARNAUD'S CIRCUMNAVIGATION OF A LAKE, AND GASCONADES.—ADVICE TO FUTURE TRAVELLERS ON THE WHITE NILE.—SWALLOWS.—MEANS OF DEFENCE AGAINST GNATS DISCOVERED. THE SHILLUKS AGAIN.—QUESTION OF THE CONTINUAL ALTERATIONS IN THE APPEARANCE OF THE NILE.—GUINEA-FOWLS.—GIRAFFES.—BLACK WASPS.—TURTLE-DOVES.—OUR AUTHOR CAUGHT IN A THORNBUSH.—FABLED LUXURIANCE OF THE PLANTS IN THE TROPICAL REGIONS.—VIEW FROM A HILL.—MANNER OF CATCHING FISH AMONG THE NATIVES.—THE SOBÂT RIVER.—THE INUNDATIONS OF THE NILE CONSIDERED.

1ST MARCH.—The Nuèhrs are afraid of us, on the whole, yet they brought us, yesterday, one of their bracelets. We shall remain here to-day till the afternoon; for, although we arrived yesterday before mid-day, yet nothing has been done by the gentlemen engineers, and every minute appears to me lost that we are on shore, for there is no village there. I made a short shooting excursion this morning with Sale, and shot two *karawans*. I approached the side where the little bay is formed in the river, in order to examine it closer. I arrived through burnt reeds at

an ambak-thicket, and came here upon thick half-burnt reeds, whilst the ground was very swampy; and then I pursued a bird unknown to me, close to the margin of a small lake, bordered by ambaks. I ought to be thankful that I was able to find the right road with my black feet over stalks of reeds which were trodden down, and to get out at last from the dangerous path.

Nùchrs are scattered on all sides; but the men did not venture near the vessels. The women, on the contrary, were excessively talkative. They *would* see the vessels, and it was with them we transacted business and bargained for durra and tobacco. They have shaven heads, and the young women, notwithstanding this disadvantage, do not appear ugly. They have a very small hole bored through the flesh, between the nose and upper lip, in which we remark a thin blade of straw, or a small stick, to prevent it closing; or they put in it a needle, ornamented with a glass bead, extending slightly beyond the end of the nose: kissing, therefore, must be very difficult, if it happen to be the custom here. The whole rim of the ear is also pierced through, and from want of glass beads or other ornament, we perceive a little piece of wood in it. There are no lines on their forehead; front and back leather aprons are slung round the hips, or simply a rahàt, made of the narrow slips of dome-palm leaves. Here and there an ivory necklace, or strips of bark are seen, and around the neck a few miserable glass beads: these are the only ornaments which the poor women possess. Although I gave them some glass beads, at their humble request, yet their modesty was so excessive, that not one of them

would sell me her rahàt. They carry the small baskets, containing durra and tobacco, on their heads, with considerable dexterity, as is common on the White River. The women, in these countries, have no voice in the public assemblies, and therefore they make up for it by talking whenever they get the opportunity—a natural wish for emancipation!

The men here and there have interesting physiognomies, and which are particularly improved by the hair being worn in a natural manner: it is mostly one and a half to two spans long, but sometimes cut short. Their red colour—which is here of a fiery red—seems to be the favourite national colour. Our men thought it was natural; but I discovered, from many of these men, that they stain themselves artificially. At first, I believed that they wore a coiffure, similar to a wig; but I soon found that they had tied up the long hair behind into a thick tuft, and plastered over the whole head with a strong coating of ashes and an alloy of clay, which has the same effect as the *hennah* of the Turkish old women, who prefer to have red rather than grey hair. We laugh at seeing these stiff and dirty perukes, and yet our perwig-mania has only of late years been defunct; whilst, even now, the highly-civilized English still wear the full-bottomed wigs, and seem to think that a quantity of powder, long, stiff body-coats, and loose gaiters, are essential for their young servants. We perceive, upon the very projecting forehead of the Nuèhrs, six horizontal lines, more or less elevated: they wear well-worked bracelets, narrow, but thick, with a sharp edge, the best of which I bought, and amongst them a thin one, adapted to the form of the

upper part of the arm, above the elbow. They have, besides, very frequently, iron rings on the wrist, and a species of battle-ring, having several tongues, similar to those I saw above, and the points of which are covered with little pieces of wood in time of peace. They adorn their ears with a bead, or a red copper ring, like the natives of the country below Bari. The *aures perforatae* are not, therefore, here a sign of slavery, as with most other people. I saw no weapons, except their artfully-constructed bows; for they told us previously that they would not bring any arms to the vessels, so that there might not be schammata (strife). I was present when the Sheikh of the right side of the shore, who had brought some cows, was clothed by Selim Capitan. He expressed great joy when the beads were shewn him, but he would not have anything to do with the white or the black maccaroni, although there were gold ones between them. He said "arràd" (bad), and returned them.

His name was Lunjòk, and his village lies at a distance from the shore. His father is a sheikh on the left shore, but the inhabitants of both sides, although they are all Nuèhrs, are continually at war with one another, which he seemed to deplore. They must possess arms, because they make war against the Shilluks and the Kèks, and are generally successful, although they do not boast of it. Most of their villages lie on lakes or gohrs up the country. We saw here also three hamlets lying in ruins, on which I walked, and where even the reeds were torn away. I plainly saw that the place where these villages stood must have been heightened by the destroyed mud-walls.

The men wear small white beads round their necks,

which are said to come from Pamm, in the country of the Dinkas: they do not themselves slaughter any cattle, as we were told, but eat animals slain by others, or those that die a natural death. They have not a supreme master, or Sultan.

Yesterday evening, we remarked a large circle of fires and solitary dhellèbs around us, denoting that the villages of the Nuèhrs were near at hand. I got to-day a curious head-dress, of leather and goats' tails; we see here also those mussels (*Cypræa moneta*), which I have mentioned before, used as an ornament. We have never observed knives since we left Làkono's country: spears seem to be used instead of them, and therefore we found them frequently worn away and useless, and not fastened by a nail to the shaft. Our black soldiers make use of the spears they have purchased, instead of knives; and, moreover, the Nubian two-edged knife, and that of Kordofan, still retain the form of a spear. The bull, as the creator and support of the herds, must be honoured and esteemed here, for the rings worn by the tribes on the wrists, from hence to Berri, are everywhere decorated with little iron horns, and the natives imitate immediately the lowing of cattle, when we look at the rings.

A very *charming* custom of these tribes came to light during our barter with them. My servant Fadl had purchased articles, as he had often done before, and given some in exchange, when subsequently they demanded that the rings should be returned, which he would not consent to. A negro tore the flesh of his arm with a spear, so that the blood spurted out; but no sooner did he see this, than he spat upon the

injured place, and begged pardon by gestures. The spitting in the hand is not perhaps meant, in the upper countries, as a mode of greeting or particular distinction, but rather as a kind of apology, or to exorcise the spirit of anger.

Suliman Kashef was even fortunate enough to receive such a secretion on his head, as a sign of respect, which made him put on a grim countenance. The people seem generally to make use of this spitting custom for the purpose of exorcising evil spirits: we find something analogous to this in the so-called "evil eye" of the South of Europe, namely, of Italy and Greece. Our deserters, we learn, passed here only yesterday; the Nuðhrs would have robbed them, as the women told the little Dinkaui in my presence; but the latter shot some of the Nuðhrs (the women said *several*), and then crossed to the right side of the river. The Nuðhrs themselves had perhaps killed a few, but were frightened that we should take revenge, and pretended therefore that they had treated them peacefully. The poor men will have a great deal to suffer in their journey to their distant home.

Half-past three o'clock.—We proceed to N. The gentle south-east wind is at our back, so that it is very hot. Four o'clock.—A short tract to N.E.; on the right a wretched hamlet, to N.W. and W., W.S.W.: green shore but low; ambaks, and some trees with thick foliage at our left. A quarter after four o'clock, N.W. to N.E. by N. Solitary elephant-trees, poison-trees, of larger height than we had yet seen, àschurs, young dome-palms, and soon a Haba on the left shore, which is elevated therefore higher than usual. Negroes and women greet us in vain

from the left side. Half-past five o'clock. N.E. by E., in a bend to N. W. and W.N.W.; then immediately N. by E. Just after six o'clock, we come to N.E. by E., and go over to the right shore. Thermometer, at sunrise, 28°; noon, 28°. Half-past three o'clock, 31°; sun-set, 28°.

2nd March.—A quarter before seven, to N. by W., then N.W.; and at seven o'clock, N.E., E.N.E., and N.E. by E. I cannot describe the agony we suffered from the gnats; my head is so heavy that it has become quite a useless member of my body. A quarter before eight, further to E.; and at eight o'clock, to the left, N. On the right, in this bend, a village, the negroes standing on their ant-watch-towers. The south-east wind is favourable; the negroes sing the usual old melodies, but cease directly, when they see the vessels sailing past, without noticing their song of welcome. The wind freshens, and the sky becomes cloudy: it looks like rain, and yesterday evening we perceived a storm in the distance.

Our deck being in such bad condition, will afford us, in truth, but little protection. Five miles. From N. in the bend to N.W., then right round at a quarter after eight to N., N.E. and E., where we furl the sails, and immediately to E.S.E. Luckily this last tract is not long, and the wind may soon help us out of these abominable regions of mosquitoes. But unfortunately now, it is contrary to us, and masters the oars so that we are obliged to go libàhn, and land at half past eight at the left shore, for the Kaiàss has remained behind. A little village is seen here, and now goes on the pulling of rings off the

arms, so that the bones crack again, and the natives even break them in two on the arm, merely to procure sug-sug. I get here, besides other things, a bow, such as those already described, a rahàt of palm-leaves, and a club with a knob, almost the same as we have seen up to Bari.

The red copper earrings, which perhaps come from Berri, do not seem to be of any particular value; for they take them out of their ears when we ask for them. The men also, when they have no ivory, wear strips of leather, or of bark, round their necks and arms, such as are usual in all the regions of the White Nile.

The hair combed back, and not entirely reddish here, but retaining its natural black colour, gives the head an European look, and particularly so, because it is not woolly, although curly. This remarkable circumstance speaks in favour of the immigration of another race, as I have formerly alluded to. And this supposition becomes still more confirmed when we observe the greater neatness and durability of their tokuls, which are entirely dissimilar to those in Sennaar; so also their household utensils, and even the form of their bows and quivers, which are similar to those seen on the hieroglyphics, shew that they are either in a much higher grade of cultivation, or have outstripped considerably in civilisation the neighbouring tribes.

A quarter before twelve o'clock. Further to N.N.E. and N.N.W. We sail six miles in the hour, and shall escape, perhaps, the rain, which has announced itself by some drops; but we are obliged to reef the sails, owing to the other vessels being behind.

A quarter after twelve.—N.N.E. to N.E. by E., a short tract; then in a bend, N. to W., and at last, with a short bend, to E. Half-past twelve.—From E.N.E., in a wide bend, to W.N.W.; but immediately again in a bend, N.N.W. We hoist again the sails. N., and on to N.E.—E. by S.

Nothing but green aquatic-grass on the shore, and although the singing, bawling, and shouting on the vessels gives life to the scene, yet all at last turns to dull monotony. Illness and fatigue make me wish to rest a little, but I keep up in order to attain the aim I have in view. The wind has changed to south, perhaps for our benefit. One o'clock.—From E. by S., where a *dhellèb* appears on the right to N.N.E., E.N.E., and N.W. by N. Two o'clock.—E.N.E. to E. Half-past two.—N. to N.W., on the right a little village behind the reeds; further to S.W., and then with a short bend W. I see blooming *ambaks* at the left, and shall be able perhaps to gather again some of its flowers, and also the little duck-meat: the double lotus is there, but I have already seeds and tubers of that plant. The first group of *dhellèb*-palms is a welcome sight before us, for hitherto we have only seen solitary ones. A quarter before three, N.N.W. There are now thirteen *dhellèb*-palms at the most on our left. On we go,—I think we shall return to these *dhellèbs*—to E.N.E. and E.; a blooming *ambak*-thicket at our right. Three o'clock. From E. shortly round to W.N.W. On the right we remark negroes. The wind is certainly not so strong as previously, yet we make five miles more. Now at the right a badly-built hamlet, which contains *tokuls* with oval doors,

and depressed and badly formed roofs plastered at the top with clay: soon afterwards, at the same side, another hamlet in the very same style. Perhaps both these villages contain summer tokuls, to judge from the miserable roofs of the huts, which do not keep off the rain. A quarter after three. From N.W. by W. to N. The wind has already slackened, but it appears again to think better of it, or we should have to expect the troublesome visit of gnats. Half-past three o'clock.—From N. by E. to N. Four o'clock.—N.W. and further in a flat arch to W. by S. Half-past four to five, W. to N. The sun sinks in a mist. At the right shore, where the reeds are burnt away, we notice a giraffe (saràff), and Suliman Kashef sends his halberdiers in pursuit of it.

3rd March.—We navigate a quarter after six o'clock from the middle of the river, wherein we cast anchor last night to N.N.W., then a little to N. and W., where a hamlet lies on the right to W.N.W. A quarter before seven o'clock.—W.N.W.; a slight S.E. wind gets up. Seven o'clock.—N.E. by E., on the right some new summer tokuls; to E. and a quarter of an hour afterwards to N.E. by E. The oars rest, and we sail very slowly with the gentle wind, the river having a trifling fall. A long course is before us and the wind freshens immediately, so that we make four miles. On the left a village at the distance. A quarter after eight.—N.N.E., N. and N.N.W., a poor fishing village at the left. A quarter before nine, to W.N.W., the wind still better; five miles. A quarter after nine, to W.; on the left several large tokuls up the country; again to W.N.W. and then N. by W. A narrow gohr comes on the left from the

reeds S.S.W. ; the whole marsh-region here is in endless connection with the river, visibly and invisibly, by open canals and reeds. On the right a hamlet. Half-past nine o'clock, N.W. Smoke or mist extends before us, making the vessels a-head appear as if they were in an extensive and elevated sea.

A quarter of an hour ago we had six miles and now six miles and a half. A row of solitary and very large tokuls continues on our left. The villages, properly speaking, of the Nuðhrs, are half or three quarters of an hour from the river. The smoke just mentioned comes from the tokuls I have described, as the smell of burning tells us. From N.W. to N.N.W. and N. ; and at ten o'clock on to N.E. and E.N.E. We leave a rush and grass island of about ten minutes long in the middle of the river. A quarter after ten, N.E., N. and N.W., and so quickly that it is quite delightful : we make seven miles. Half-past ten o'clock.—We double half-dried ambaks, which still display flowers. To N.N.W., N.E. by E., then shortly to N.W. and N.W. by W. On the right some negroes standing by their boats : they shout to us, but we wont hear. A quarter before eleven. From N.W. to N.N.W., N. and N.N.E. we have a long course before us, with slight declinations to N. by E. There are no elevations of the shores either right or left ; merely aquatic reeds : behind, here and there, the surface of the earth is dry, and there are a few ant-hills with parched grass or a reed-hut. Eleven o'clock.—With a short bend N., we make eight miles : to N.W. and soon to N. On the left some wretched reed-tokuls, and negroes, the women standing upon a mound and singing. Further

to the right N.N.E. Half-past eleven. Shortly to the left, round N.N.W. and W.N.W. then immediately to N. and N.N.E.—A quarter before twelve o'clock, still N.N.E. and then N.

The Turks have *one* magnanimous custom, despotic as they are in other respects. If the master call and the servant answer boldly, "I am eating," he need not come; so if the former say, "Call me such a one," and his messenger comes back with the report that the man he wants is asleep, the master lets him > quietly take his siesta whatever hour of the day it may be. Twelve o'clock.—N.N.E. and immediately N.E., then N.N.W. and again N. A quarter after twelve to N. by W. and N.W., when we turn to N.W. by N.; then we go in a regular bend N.E. to N.E. by E. A quarter before one.—N.W. by N., and at one, to N.E. by N. We have just saved a Dellàhl (crier at the sale of slaves and public auctions), the Abu Haschis of the Kaïass, who jumped into the water to seize a large dead fish, notwithstanding we were sailing quickly. With a few exceptions we still continue to make eight miles. Nothing but aquatic reeds and crown-rushes; very few high reeds, and these beyond the reach of the water.

I will now repeat my journal word for word, in order to give the reader an exact description of the labyrinth of the river. I have hitherto partly avoided the detailed description of the windings, so as not to be wearisome by constantly repeating the same thing; and these, moreover, are shewn in the map which was composed on the groundwork of my journal, and which accompanies this work.

A quarter after one.—From N. in a bend to the left, N.N.E., and then again right round in an arch, where the south-east wind may be contrary to us; N.E. with a short turn to E.N.E., and on to E.S.E. The sails can work, for the wind graciously continues and blows in S. Half-past one.—From E.S.E., shortly round the left to N.N.E. and N.; we furl the sails in order to wait for the vessels behind. Two o'clock.—In the bend S.E. and E., where a tolerable course displays itself, and we again draw in the sails. A large hippopotamus snorts at the side of the vessel, and no one laughs at it, for we have learned to know already that the proximity of these ship-stormers is dangerous. A quarter after two. To the left in the bend, E.N.E.; we sweep by on the reeds like lightning, N.N.E. to N. by E., then in a flat arch to the right, N.N.E., which bends still more to E., E.N.E., and S.E. We saw several black birds both yesterday and to-day, called gatàff by the Arabs, —a species of water-hen, which flew over the ships in swarms till late in the evening, and uttered a piercing cry.

A quarter before three, from S.E., left to N. by E., and right, N.N.E.; four miles, with a slack wind. Three o'clock, from N.N.E., shortly round the right; a small island at the left, with reed-grass, crown-rushes, and blooming ambàks. To E., where a tolerable road opens before us; then to the left, E.N.E. Course three miles and a half; but the cloudy sky forbodes a squall, yet it may blow off, as it has done on other days.

Half-past three; from E.N.E. to the left, in a bend N., and N. by W.: a road before us, then to the

right : make again five miles—in the bend, N.N.W. A quarter before four, on and on slowly to the right, N.E. On the right a large lake, which is connected with the river by a wide mouth ; several negroes standing there, but no tokuls to be seen. Four o'clock, N.N.E., then to the left, with a small declination to N. by E., and then to the right ; three miles rapidity—E.N.E.

Half-past four.—To the right E, and straight-forward, with small inlets, further to E. by N., five miles. The wind blows fresher. Five o'clock, from E. to the left, shortly round N.N.E., to N. by W. Half-past five.—From N. to the right N.N.E., still there are no shores, no burnt tracts of land. A quarter before six.—From E.N.E. to the left N.E., where we anchor in the middle of the river. A little lake, Haba, and the isolated tree to the right.

4th March.—Departure at half-past six o'clock, from N E. to N. by E. A quarter before seven, in a flat arch on the right, to N.N.E. Hitherto, not any wind, and perhaps not much hope that there will be, for the day is clearer than usual, although it blows a little from the west. The west wind only brings rain now and then to the land here. Seven o'clock, from E.N.E., round the left N.W. ; on the right the " Village of War," so called by the crew, on account of the cruelty exercised previously on the natives, and which I have already related.

Half-past eight ; from N.W., on the left two little islets follow one another, to N.N.W. A quarter before nine ; the vessels come behind us, the south-west wind gets up a little, and we sail therefore on to N. ; three miles ; N.E. by E. Selim Capitan says

we made sixty-five miles yesterday, and thirty-five more to-day, in the direction of the lake of the Bahr-el-Gasàll. Nine o'clock, from N.N.E. ; a little island in the bend, to the left N. and N.N.W., then in a flat arch to N.N.E. Half-past nine, N. by W.; the wind freshens for five miles, N. and in the bend, on to N.N.W., where we are unfortunately obliged to furl the sails, owing to the strong north-west wind which has set in. A quarter before ten: we go N.W.; the wind becomes fresher; it seems inclined to be contrary to us the whole day, and we have enough to do to stand against it. A quarter after ten; W., and slowly to N.W., then right round to N., where we spread sails, after the wind had changed magnificently to the west, and perhaps will go again to S.W.—five miles. Eleven o'clock; from N. by E., in a bend to N. by W., in a long bend N.N.E., then shortly round the right. Half-past eleven, to S.E. by E; afterwards in the arch to E.N.E., with six miles, and on to N.E. and N.N.E. Twelve o'clock; from N.N.E., a jump to the right, N.E. by N., then in the bend to N., and again N. by E., and a little to the left, N. One o'clock, N.N.E., and further to N.E. Half-past one; to N.N.E., and again in a flat arch to N.E. and E., to E. by S. Two o'clock, E.N.E.

The neighbouring ambak bushes approach us in these windings, and make the shores less monotonous; yet it does not last long, and we see again only grass, water, and sky. Half-past two, N.E.; a quarter before three, N.E. by E. We see from the deck a high mountain to N.N.E. at the distance. It must be the so-called Tickem, or the Morre, as Marian

now says more correctly. The people have no end of joy at seeing this mountain, for they consider it to be the finger-post to Khartûm, and they are looking for the dome-palms now as another sign. Three o'clock.—From E.N.E. to E.; then, with the slightest bend, to N. The marsh-land is from a few inches to half a foot high, on dry ground; there are some ant-castles on it, and water-reeds and solitary ambak-bushes on the left. A little foward to the N., and the so-called Gazelle River rushes with great force close before us. Unfortunately, this is another pretext for the gentlemen engineers to stop—yet uselessly—whilst we ought to make good way with the favourable wind, in order to follow the Sobât further. We go also immediately to the right marsh-reeds, as usual to collect gnats for the night. The Nuèhrs love their cattle, and, like children who won't have their pigeons and rabbits killed, are excessively delighted at watching their growth and increase. We see not only from this that these people do not kill the animals for eating, but also from the manner in which they decorate the beasts, insomuch as they put on them broad necklaces, covered with little conical bells. The necklaces are of iron, and, as this metal is very rare amongst the Nuèhrs, they seem to take more pleasure in manufacturing ornaments than arms, though the latter are of the first and highest importance to a people living in a state of nature; yet they may, nevertheless, be richly provided with them, and do not wish to display their warlike side to us, for we have lost their confidence by the barbarous conduct of the first expedition. A closer investigation of this nation might give interesting results: their

curly, not woolly hair, the antique form of their bows and quivers, their war-caps, similar to those of the Egyptians, and their worship of animals, would serve as a very instructive guide in the Ethiopian labyrinth of history.

5th March.—Nothing done, unfortunately, by the engineers: I myself could not land, owing to the marsh-reeds.

6th March.—Dined with Selim Capitan, where Arnaud had a fit of indigestion, from having eaten too many *futir* (tarts).

7th March.—At last Arnaud went in the sandal to circumnavigate the lake, without saying a word to any one of his intention, because he means to pretend that he has seen everything, and to impose on the Basha by a large *bakshis*. This lake is said to make a great figure on his map, which he must have got others to compose for him at Paris, because he himself is not capable of doing it, as Sabatier expressly declared. Yet he was so close to us all the time he was navigating it, that we never lost him out of our sight. He wished also to investigate the Gazelle River by himself, but he was afraid of remaining with the sandal in the reeds at night, where he might have become a victim to gnats or other monsters. The *Bach'r el Gasùll* does *not* display at this time of the year *any* fall, nor does the Nile here in the lake, although the breadth of its stream is clearly distinguished from the bluish water of the latter by its muddy colour. The lake has fallen about a foot since our ascent, of which we have plain proof by our shore. There is want of wood on board the vessels, because the crew have kept up a clear fire every

night to drive away the gnats, without even giving a thought that the smoke alone has that effect. With respect to this abominable brood of insects, I earnestly advise all future travellers to provide themselves with a musquito-net (Arabic, nammusië, from nammùs, gnat) if they wish to escape the torments of hell, and to preserve their health and perhaps their life. I myself shall be grateful to God if I only remain strong enough to continue and end my journal as accurately and faithfully as hitherto; so that by its means I may correct the maps which may be published subsequently, and particularly with regard to the numerous windings and bends of the river itself, which can only be followed by the strictest attention.

8th March.—Arnaud again to-day kept his intention very secretly, and navigated the Delta before the Gazelle River—a famous opportunity for relating anecdotes of continual adventures and hippopotami-hunts. He really does gasconade too much: for example, he states, quite at random, in the presence of Sabatier, the number of miles he has navigated the last two days, although he has never cast out the log; whereupon Selim Capitan laughs in his face. Arnaud never scruples either to ask for anything that pleases him. “Son Altesse,” serves always as his excuse, as if he were collecting *only* for Mohammed Ali. At half-past ten o'clock a few drops of rain fell. M. Arnaud having returned from his great voyage of discovery, we sail out of the lake E.S.E. The weather seems about to clear up immediately, although the sun casts a certain watery gleam of light on the marsh-grass that we cannot trust.

It thunders, and we go with a west-wind right into the dark clouds. Half-past eleven o'clock, the rain has fortunately come on; the wind has changed from W. to N.E., and we go with oars again to E.N.E. A quarter before twelve, ~~the~~ wind blows freshly on the right shore of the reeds, where we make a whirl again, because the crew are tired out by their sleepless nights. Drops of rain only are falling, but the pell-mell confusion in which the vessels navigate is enough to drive one to despair: no taking to the oars—no wish to do anything—no command—the tailor-captain is sitting at his handy-work.

The shores are, or form, short reeds and grass standing in the water. Twelve o'clock; to E. Half-past twelve; S.S.E. One o'clock; E. by S., a large lake to the right, scarcely separated from us. Two o'clock; with a trifling declination left to S., and in a flat arch, E.S.E. The wind has changed to the south, and we sail a little—two miles. However we see showers of rain pouring down nearly all round us, and it will be fortunate if we escape them, for where could we fly to to preserve ourselves from the rain which soaks through in these regions? Half past three o'clock; from S.E., with a few deviations to E. by N.: we make four miles, for the wind has settled in south west, whereby a few drops of rain sprinkle us from the right side, and we go then directly a short tract N.N.E., leaving behind us a *large* floating-island, very rare here in comparison with the small ones. A quarter before four; with a short bend to E.S.E. and E., then from E.S.E.; on the right here a large lake; immediately at a quarter after four to S.E. by S., and on the left to E.S.E. and E. by N.

The rain is like that of a German May. On the right shore, a somewhat scanty forest, where we halt, at a quarter to five, on account of want of wood; at five, however, we bear off again, for these little mimosas afford us no wood. From S. to E.S.E.; a large lake again on the right. How much earth must the mountains of Bari and elsewhere supply before these shallow lakes can be elevated into land and fields! Half-past six; from E. by S. to the left in E. and E. by N., where it makes a leap to E.N.E. The wind has become slack: only two miles. Six o'clock; to E. There are many swallows flying over the reeds; they seem to be making a tour of pleasure with our deadly enemies the gnats. These birds may either not anticipate the rainy season, which is close at hand, (unless they are already on the road to our home,) or they remain here entirely, and most of them perish, as we have seen in Taka, where, however, the trees protect them. Half-past seven; E.N.E. On the right a large lake: we anchor in the middle of the river, and it begins to be dark. Thermometer, sunrise, 22°; noon, not above 27°; sunset 27°.

9th March.—We start, though it is raining, at six o'clock, and go E.S.E. and immediately E., and sail with a north-west wind to N.E. Seven o'clock; round the left to N.; immediately, however, to the right, E.N.E. and E. The wind has gone round to south east, and freshened, so that we make six miles. We see from the deck ten villages scattered at some distance on the left side, and a lake on the right. The lakes mentioned yesterday, which were encircled here and there by ambaks on the side turned from the river, and not, as usual, by the Habas, could only be

perceived from the deck. We go at eight o'clock to S.E. with oars, after some delay, in consequence of our vessel having come into collision with Selim Capitan's. The wind has slackened considerably: a large lake on the left.

A good idea unfortunately often strikes us too late. Last night, I was trying to defend myself with a fan against the onslaughts of the gnats, but often let it fall from pure weariness. Continual stings, however, soon waked me to pick the fan up again, till about morning it came into my head to erect a small tabernacle over my face, by means of a linen cloth. Yesterday evening I repeated that contrivance, and was scrupulously careful in forming it, when I found that the little pincers and pests would not let me eat in peace, and poured out of their lurking-holes with bloodthirsty intentions. I drew, therefore, my little conical canopy over my head: I was very hot under it, but yet not a mosquito was able to pierce through it. They buzzed and hummed outside, and the crew cried, "Bauda! bauda!" but I was comparatively jolly, and of good cheer.

A quarter after eight. E.S.E., then E. Some trees before us; two villages seen from the deck, behind the reeds on the left. Nine o'clock. Right round to E.S.E.; here, on the left, a little lake, and three villages near the above-mentioned three or four trees, ten minutes from the shore. The tokuls, which are not so large as those previously seen, and have slightly arched roofs, seem to denote that we have come already to the country of the Shilluks. It does our heart good to see human habitations once again close to us. The Nile has been really very tedious

for a long time : I sit here, a “*passer solitarius in tecto.*” I always thought that we ought to bring every landscape before the reader’s eye, like a row of pictures on the wall ; but there is a continual and tiresome repetition of natural objects here : yet I feel it my duty not to spare the reader. Ten o’clock : continually E.S.E., with very inconsiderable declinations. Several people and villages on the left shore, at five minutes’ distance : they are really Shilluks. From the deck we see immediately ten large and small villages. We wind, still rowing, in a flat arch to the right, S.E. ; then to the left, E. by N., at half-past eleven ; and again slowly to the right. Four villages, the last a large one, at our left : they lie intermixed on the bare high shore, or rather grass and reed-sea, through which the river winds. Some Shilluks, no doubt a very populous nation, greet us from the shore with “*Habàba !*” (borrowed from the Arabs : in Taka, also, they say *habàba*—otherwise, *mirhabà*). Three mountains project on the right. Eleven o’clock, S.E. ; three villages on the left. Half-past eleven. Slowly from E.S.E. to the right, S.E. by E. ; then to the left, E., and the river immediately makes again a bend to the right, in E.S.E. The wind freshens and detains us ; yet we have gained just this moment, for the river goes further to the right, and the wind has changed to N. The high shores, behind which the whole country is bare, with the exception of a few *uschàrs*, and seems to lie higher, approach again the river on the left ; and two villages shew themselves at some hundred paces, on the gently-ascending downs ; below them the old river-bed appears on dry ground.

The Shilluks, armed with lances, and standing on the shore, shout again their "Habàba!" but we sail now, and they do not offer us anything, much as we should like to make use of their cows and wood; and besides there are two many of them. Groups of tokuls stand in a row. A quarter after twelve, continually E.S.E. Half-past twelve, S.E. by E.; to the left, E. The wind has changed, and is contrary; so we go E.S.E. The Shilluks also have sleeping-places, open at the top, wherein warm ashes form their beds, with which also they powder their hair, thereby making it look grey.

A quarter before one. From E. by N. A gohr on the right, and we go, at one o'clock, E.S.E. Half-past one. The river takes a direction before us to E., with some little inlets, so that we cannot see the lower shore. The wind blows strongly against us from E. We have but scanty fare, being without meat. I cannot deny *kew* to myself now, for I really want it.

Half-past two. E. by S. A Haba on the right, before it a lake connected with the river in front; the forest is upon a gentle declivity, and covered with shrubs, thorns, and dwarf-trees, even to the edge of the water. The shore also falls away gently to the river, near which it only rises a little above the narrow green margin of grass. We halt close to the right shore, owing to want of wood

The shore ascends to about fifteen feet high, where the trees begin, and is composed of nothing but mimosas, although the Nile very certainly does not flow over it; for the river has full play far away to the left.

If we call these lakes, marshes, and reed-morasses,

a longitudinal valley, enclosed as they are with the Nile between two high shores, which, however, do not ascend to the due height, the original shores perhaps lying still further by the irregular low line of mountains, or rather hills, it is plain that the same is gradually filled by alluvial deposits from the mountains of Bari, or from above, and an accumulation of vegetables, or the momentary sprouting forth of an corresponding kingdom of plants, must have soon followed the more important vegetable matter. As the sluices of the so-called valley pour into the great Nile, it must have falls on a level with the Nile itself, and has, therefore, dug a bed, and made an even slope to this side, after the stream had removed the first barriers or dikes of the high shores, which are now secure from any inundation. A river-bed, indeed, naturally becomes deeper when there is a proper fall and a regular conduit. The lower Nile has elevated its bed, because it has but few vents. Why could not the White River have a similar retrograde connection of water, which is prevented from flowing off, such as is the case, in the first place, near Khartûm? The Nile here might have been previously in majestic fullness, and flowed rapidly between the present old shores to Khartûm, until it created shallows and islands, where reeds and water-plants of every species sprang forth luxuriantly from the nearly stagnant water, and vehemently opposed the natural course of the river, seized the alluvial deposits from above in their polypi-arms, and rose to what we now see to be meadows and marshes.

The Shilluks are tolerably acquainted with

the good disposition of the Turks: as soon as a vessel approaches a group of them, they get up and go away; this even befell Selim Capitan, in spite of his interpreter. When they see us coming, they drive the cows from the water, even without letting them drink. We on our side are afraid, and with justice, to land on the inhabited spots. I brought back two guinea-fowls, the produce of my shooting excursion with my servants; I had seen Suliman Kashef with one of a similar kind above. They are not at all like those in Taka, and different only from those of Europe by the darker colour of their plumage. We shall remain here to-night; thunder and rain have been satisfied with merely threatening us,—and are happily over. I disembark once more, and see fifty to sixty giraffes in the level shore towards the horizon, but it was too late to get at them. The thermometer was at nine o'clock in the morning 21° , but did not get up afterwards to more than 28° , fortunately for us,—not so much on account of shooting as because the heat might have been insupportable, for we were between these high shores à talus, with an average angle of 25° to 30° , and the wind was entirely still.

10th March. We remain to-day here for the sake of shooting, conformably to Suliman Kashef's determination. His halberdiers set off to-night to follow the course of the giraffes, and to find out their abode in the gallas,—unfortunately without success, for they did not like perhaps to trust themselves so far in the territory of their deadly enemies.

I remarked a number of burnt bones of hippopotami in the low forest lying close to the river. I should

be inclined to believe that the natives burn the carrion intentionally, in order not to be exposed to the disgusting effluvium. A species of black wasps build hanging-nests here, which however seem from their transparency to contain very little honey. I could not ascertain this more exactly, because I was obliged to be cautious in breaking off a branch with such nests on it. We remark low mountains beyond the softly ascending desert, and perhaps the dry water-courses which issue here from the steppe flow to them, and *there* may be the real abode of the deer. In my shooting excursion I looked carefully among the thorn-bushes, and found that the plants are mostly the same; I had fancied quite otherwise. A blue convolvulus—not, however, belonging to the water—displayed a lighter colour than usual, and had also round and glutinous leaves: I took seeds of some pretty creepers and gathered the fruits of the shrubs, for I was already acquainted with the leaves. Every thing now was withered, and I am curious to know what will become of the various seeds I have collected when they are sown in Europe.

Most of the birds had retreated before the shooting of the other sportsmen commenced, but I stumbled upon several turtle-doves, and instinctively grasped my gun, letting my botanical bundle fall on the ground. I shot some, and got under a tree, where I saw them fluttering around. The thorns stuck to me and pricked me all over, and there I sat bent, like an ostrich caught in a thorn bush, compared with which the bull-rush of Moses was a child. I could not force through it with my coat on and gun in my hand; so I got loose from the sharp barbs of the thorns with

torn clothes, leaving behind the tarbusch, takie, and half my cowl, without even scratching my ears, though they were bleeding enough already. I fetched back my tarbusch by means of my gun, and then examined my malicious enemy a little closer, notwithstanding he was an old acquaintance. I found withered apples on it, and gathered some, for the sake of the seed; when green they are exceedingly similar to oranges or Egyptian lemons. I have not found it confirmed that they are deadly poison to camels.

11th March.—"Bauda mafish, am'd el Allàh!" (the latter properly Hamdl el Allàh,) was the cry on all sides to Allàh, because the gnats had taken their departure, and I hope that those which are still in my cabin will soon follow their companions. Departure at a quarter before ten to S.E. by E., then a little E. by S. Summer or pastoral villages no the left: we perceive also herds, but not a morsel of them is destined for us. On the right an old river-bed or narrow lake, mostly marshy, and connected below with the river. A quarter after ten, E.S.E., on a pretty good course, with the exception of some shallow inlets. We sail, with a south-west wind, four miles. On the left again open reed-huts or sleeping-places, and herds to which the people are collecting,—on account of the Turks. All the Haba here is deposited soil, which lies almost always higher than the other ground. This evidently fading forest once enjoyed better times, when the blessing of rain was afforded it, but the benefit of which it lost directly by its higher situation.

What fables are told of the incredible luxuriance of the tropical kingdom of plants! At all events it

could only be said of aquatic plants which are forced by water, evaporation, and sunshine, as if by steam or chemical preparations ; but then only in the rainy season and a few weeks beyond. I saw, indeed, trees shooting forth at this time in Taka, which boiling and cauldron-shaped valley may perhaps contain a tropical growth, or something like it ; and plants springing up from the morass with incredible celerity and luxuriance, as if by magic. But trees that have true manly vigour, and strive to shoot out with sound strong muscles, whose pith is still clearly to be seen in the bark, with not a bough injured,—not a branch hanging down withered,—these are sought for in vain in the Tropics, so far as I have seen. We can form a tolerable idea of the momentary life and vigour there by comparing in Europe, acacias, planes, and poplars, on suitable soil ; it is the most cheerful awakening after a long repose : but part of the limbs always continues in a sleep-like death, whether it be under the bark of the stem, or a bough that the sun scorches, or a runner become dry, which disfigures the whole tree. A forest requires care, either by the fortuitous kindness of Nature herself ; or, when that is not sufficient, by the directing hand of man. The omnipotence of the terrestrial womb of fruits is past,—that which gave previously the magic of lovely green to the coming species, without any visible seeds of themselves. Half-past eleven o'clock, S.E.—It has just rained a little ;—what anxiety and fear of rain these half-naked coloured people shew ; what care they display in preparing immediately a tent to sit under ! I have very often remarked this ; rain must therefore make a sensible impression on their

hot skin. Twelve o'clock, E.S.E. We see at the distance on the left towards the horizon, solitary dhellèbs as usual on elevated ground; and also isolated little groups of Shilluks. Narrow tracks of water right and left, which not long ago were flowing cheerfully. The river has also gradually laid aside its terraces in preceding times, until it has limited itself to its present bed; and those parts of the shore, lying higher are only just moistened, even when it is at its highest water-mark. It would be interesting to follow these old river-beds in the ascending line at the side, and to arrive at the dams of the primitive stream, or at the higher circumvallation which surrounded the lake here at one time. A quarter after one o'clock.—On the right a gohr cul-de-sac, low bushes to S.E., called by the very same name as the Haba; on the left solitary trees and straw huts of the herdsmen. At two—on the right, another gohr cul-de-sac,—to E. We sail E.N.E, and wind, for the first time since the morning, to the left: a track of water in the shape of a terrace, just there, from half a foot to a foot higher than our level. A beautiful line of dome-palms before us, but still thicker a little to the left. Half-past three, N.E.—Heaps of simsim-sheaves on the water at the left, and a row of ten villages near the dome-palms. A broad gohr or river comes from W. This may be the river of the Jengähs; but it seems to approach in the background too much to the Nile; perhaps therefore it is that gohr which is said to have its old river-bed on the high shores, below the villages of the Shilluks. A quarter before three, E. We see on the left seven more large and small villages, by or near that row of dome-palms, which on this side is very

thin; then a dome-forest to the left at a quarter of an hour's distance.

An unlimited water-course before us in E. by N., but no huts to be seen on the left. Therefore, the nation of the Nuèhrs might have been dislodged by the Shilluks from that quarter; for the former extend, or are said to extend, up to the Sobàt and its shores. This side, at all events, had been inhabited, as I plainly saw this morning at our landing-place. The Haba, however, continues at a slight distance from the river; on the left also the dome-forest is now reduced to a strip of a wood. The shores are surprisingly low on both sides; and therefore not any tokul-village is to be seen near them. A gohr is on the right, which is scarcely separated from the river, and in connection with it, like the other narrow ones. Three o'clock. On the left three more villages in the dome-forest tract; and on the right and left parrallel gohrs, subordinate Niles, which are now stagnant, and the fish in which are a prey to men and beasts. Four more villages to the left, near the dome-wood retreating from the river; on the right the forest thickens.

Half-past three. Towards S. We have a tolerably high and apparently planted island at our left, and halt at the right near a hill—probably a deserted domicile. But look there! that is really the far-famed Sobàt, the water of which is flowing against us, and which is so much feared by the crew, who are tired of the voyage. I soon disembarked on the shore, sauntered up the hill, and was surprised to find that I could see so far in the distance, and fed my eye and mind with a diorama which extended from W. to N.E.

The Nile is conspicuous in the W., and meanders to N.E., where it is lost to the sight. An isolated dhellèb-palm on the right shore indicates this last boundary. The horizon behind this glittering length of the Nile is adorned with a transparent forest of dome-palms, interspersed with slender dhellèb palms, with their small heads. The basin of a lake spreads from W. to N.W., at my feet, and the river Sobàt winding downwards from S.E., and flowing in the depth at my right, unites with the Nile near the lake: both its shores are bare, and only a few melancholy straw tokuls stand on the extreme point of the right shore. All the remaining part of the district extends far and wide in a dead waste, with a little withered grass; and the horizon alone from S.S.W. to S.W., displays afar some palms and other trees, through which the blue sky glistens.

The lake lying in the angle between the left shore of the Sobàt and the right of the White Stream is connected with the former by a narrow opening, evidently prevented from closing by the hand of man. The mouth, as is the case elsewhere, is merely stopped up by reeds, to keep the fish of the lake in confinement. Our blacks shewed on this occasion what they do to catch fish when the water of these lakes is shallow, and does not reach up to a man's middle. They disturb it with their feet, put fishing or conical baskets into it, and harpoon the large fish, who come to the top to breathe.

The Sobàt, swelling at high water far higher and stronger, has raised unquestionably a dam against this lake, the former river-bed of the White Stream, and pressed the Nile more towards N.W. into its

present bed. Notwithstanding such an advantage being at hand, the natives have cut through the dam for the purpose of catching fish. The Sobàt has shortly before its mouth a hundred and thirty mètres in breadth and three fathoms in depth, whilst when we were here before it was four fathoms; and according to Selim Capitan, a few days earlier last year, five fathoms. We can tell but very little generally of the depth of the Nile, because its bed is very uneven, and the stream causes eternal fluctuations.

The name of Sobàt could only have been given to this river by the Funghs, for the Arabs have never possessed it, and usually call it Bach'r el Makàda (river of Habesch.) The Dinkas name the White Stream Kedi, and *this* Kiti, which mostly denotes water in the dialects on the White Stream up to Bari, where it is called Kirboli: Kir also means water among the tribes down the river. Its name is Tilfi and Tak with the Nuèhrs and Shilluks.

When I view the steep and high slope of the shores of the Sobàt, and the proportionate thin layer of earth on the immovable strata of clay or original soil, which here is twenty to twenty-five feet higher than on the shore or in the bed of the Nile, I return to my former conviction, that the immeasurable particles of stone and plants stream by means of the breach, and flowing away of the lakes of the Ethiopian highlands, to the lake of the basin-shaped valley of the White Stream which flows off with the Nile, as the deepest point; and that all the lower country under the mountain chains of Fàzogl and Habesch, from the Atbara to the land of Bari must be under

water, if it be not a lake connected with the depressed regions of the White Stream. If the lakes, therefore, of that lofty plain were torn by a powerful catastrophe, and deserted their chasms or valleys, as the water-basins of Switzerland did formerly—(even now there are lakes or flat valleys, signs of a deluge, in which the waters might have dashed from the summit of Atlas to the top of the Alps)—there is no question that the lower lakes or valleys must have filled and overflowed. The first rushing-down of the mass of waves, incredibly violent as it must have been, the falling of mountains accompanying it, and their washing-away, overpowered everything below them, as if gods had descended from Olympus, and no longer recognized those limits that would have remained eternal obstacles by an inferior shock. The first deposit was a layer of clay on the side of the Sobat, whilst the White Stream suffered no such sediment when in its primitive strength, and washed away everything that it could seize, as is shewn by the far lower shores. The high shores of the Sobat and its environs fall away, especially towards the level parts of the left side of the Nile, to which the accumulated slime could still less arrive owing to the stream carrying it off, although several gohrs and rivers from thence pour into it. These afford water certainly, but no slime to increase the height of the shore, as we plainly see by the Gazelle River, and also in the little Kiti of the Jengähs called Njin-Njin. We must assume from the Dinka country and its greater elevation, that the ground towards the Nile was heightened formerly by its gohrs flowing from above, or perhaps constant rivers; whilst

Kordofân, which lies over the left shore of the Nile, discharges no rivers, and its oases have run down from the mountains themselves, and formed islands in the sands which still remain, for the sunken ground forms cisterns that nourish the succulent power of the mountains by imbibing the moist element ; or it may be, that springs were bored by God's own hand.

CHAPTER IX.

ROYAL CRANES.—SCRUPLES OF FEYZULLA CAPITAN.—COMPOSITION OF THE SHORES.—DESCRIPTION OF THE DHELLÈB-PALM AND ITS FRUIT.—FORM OF EGYPTIAN PILLARS DERIVED FROM THIS TREE.—DIFFERENCE BETWEEN EGYPTIAN AND GREEK ARCHITECTURE.—DESCRIPTION OF THE SUNT-TREE.—DEATH OF AN ARABIAN SOLDIER.—VISIT OF A MEK OR CHIEF.—DANGEROUS RENCONTRE WITH A LION ON SHORE.—PURSUIT OF THIS BEAST BY THE AUTHOR AND SULIMAN KASHEF WITH HIS MEN.—FEAR OF THE NATIVES AT THE TURKS.—PLUNDER OF THEIR TOKULS BY THE CREW.—BREAD-CORN OF THE DINKAS.—ANTELOPE HUNT.—DIFFERENT SPECIES OF THESE ANIMALS.—IMMENSE HERDS ON THE BANKS OF THE WHITE NILE.—LIONS AGAIN.—BAD CONDITION OF THE VESSELS.

12TH MARCH.—We set out at half-past nine o'clock, and sail to S.E. by E. Shrubs on the higher shore to the right. A quarter before ten, from S.E. by E. ; further to the left round a corner, to which a bend corresponds on the opposite shore: this is often the case on the Nile. To E N.E., and immediately again with a short tract to N.E. The river flows with all its force against the left shore, and therefore the latter is higher, more perpendicular, and disrupt, than the right, which soon, however, becomes similar. We go a short tract libàhn, and see a few miserable small straw tokuls with *thin* doors, on the left, in the little green underwood, which seems to be nourished by the inundation, and is mostly young dōbker.

The shores display again iron oxyde. A quarter be-

fore eleven : from E. by N., to the right, E.S.E., where we sail. The shores on the right and left are higher, according to the current, and the falling of the river is accurately marked out on the shore by little gradations, which are exceedingly regular, and one to two inches high. We crawl on only slowly with the faint south wind, and make now one mile ; for the current being stagnant below towards the Nile, told me directly that the floating companion of the mountain dissipates quickly its water, differently from the slow, crawling Nile, which is obliged to work through the plain of a lake-basin.

Eleven o'clock. The wind freshens, and we go S.E. and E.S.E. On the left a solitary dhellèb-palm rises on the shore, with its beautiful and really symmetrical head ; its slender base without rings, and its elegant foliage. From hence in the bend, further to the right, in S., where five dhellèb-palms break the uniformity of the high shore on the left. A low ridge of a hill lies near them, on which a village must have once stood. If I could but transplant the tallest dhellèb to Louisa's island, near Berlin, to make it the common property of all the northern nations ! It is hot, for the high shores keep the refreshing breeze from the deep water, and only the sail enjoys a cheerful gust of wind, with the assistance of which we go, at a quarter before twelve, from S.W., where a regular forest before us presents itself to the eye, to the left, in S.W. by S. We make two miles ; a quarter of a mile, perhaps, being derived from the current. A quarter after twelve, from S.W., to the left, E. by N. We hardly move from the place till it blows from N.E., and then we go better, having

four miles' course. An old sailor runs on shore close by the vessel, to find crocodiles' eggs; tumbles into holes, falls in the grass, and is using every exertion to find a convenient sand-path instead of the clay. The crew call him to come off, but he wants to shew that he is a nimble fellow—thus every one has his hobby-horse.

The river winds continually in a bend to the left: a wretched stunted forest on the right, and miserable tokuls, without people, here and there on this shore. One o'clock; from E. by N., where the river winds again to the right, S.E. by S. We halt at a quarter before two, at the right shore, yet not to let the men rest; that would be against the Turkish custom, for they think there are no human beings except themselves. At three o'clock we go with libâhn to S.E., and immediately to the left E. Half-past three, in a bend to the right, S.S.E.; and four o'clock, on the left, in the bend, to E.S.E. Five o'clock, from E.N.E., on the right to E., where we stop at the right shore.

Last night I awoke up several times, and the wild geese on the neighbouring lake, seemed to call to me in a friendly manner, and scream "Here *we* are, for you have not had for a long time either sheep, goats, or fowls." I was on the wing therefore at day-break, but saw only four royal cranes (*grus* royal, Arabic *gornu*, or *chornu*), one of whom I shot, for they are very delicious when dressed in a ragout. Feïzulla, although he has been seven years in England, drinks drams and wine like a Turk, and scruples to dine with me, because I had not cut the bird's throat immediately after it was shot, whilst it was yet

alive, and made it *debièg* (koscher, as the Jews say). These beautiful birds, with a tuft of golden hair and shining feathers, appear in flocks on the White River: my Sale killed a brace in a moment, and would have brought us more if he could have followed them. The geese would only surrender at discretion to the "longue carabine," and I had only my short double-barrel.

I visited once more, on this occasion, the hill above-mentioned, which I found quite adapted for the situation of a village. I had seen already the remains of potters' ware, and solitary flower-gardens, or plots of ground trodden down, where once tokuls stood, but where now neither grass nor shrubs could grow; and I came to the conclusion that a considerable village must have stood there, which could have belonged only to the Nuèhrs, and was probably destroyed by the Shilluks. Thermometer, sunrise, 21°; half-past nine o'clock, 28°; noon, 29°; no rise beyond that was perceptible afterwards.

13th March.—Departure at seven o'clock, with libàhn to E.S.E. by E.; then to the left, E.N.E., and we sail with a good north-east wind. A quarter before eight: from E., in the bend to S.E.; on the left some straw tokuls. The wind becomes strong, and we make six miles for the present; the mountain stream seems to be here at its lowest pitch, and has only a quarter of a mile rapidity. Eight o'clock; from S.E. by S.; to the left, E. by S., where we are obliged to go libàhn. A quarter after eight, to the left, but we halt before the corner of the bend till noon, owing to the violent east wind. I made a little excursion into the immeasurable plain, which was tree-

less and comfortless ; and found two villages, better built than usual, to which I was not able to approach, and likewise a long and dried-up marsh. I could not, unfortunately, discover any guinea-fowls in the durra-stubble.

At twelve o'clock, we proceed with libàhn to N.E., where our Bach'r el Makàda winds again to the right. Half-past twelve. The shores, with few exceptions, attain a height of fifteen to eighteen feet: the upper surface of the soil consists of humus to two or three feet deep (which may be deeper in the low ground, old gohrs, and several tracts), and under it nothing is seen but clay or mud, having a yellowish colour on the shore, from the iron oxyde, with which it is strongly impregnated, and generally more so than on the White Nile, where this is only the case in layers. A fertile country, but requiring human hands, canals, and sakiën. We see from its shores, and in the dried-up pools, which receive very little nourishment here from vegetable matter, particularly on the upper land, that the Sobàt brings down fruitful earth or slime.

From half-past twelve to two, in a bend to the left, S.E., where we go again left in N.E. by N. On the same side there is a tolerably well built little village on the shore. A quarter before three, still further to the left, N. by E. Four o'clock, we wheel to the right in E.N.E., where we get the view of a genuine low forest, and notice on the left a village in the winding to S. by E. Half-past four, also further ; a hamlet on the right with straw tokuls, the first on this side. We see here also reed-boats, as among the Nuèhrs and Shilluks on the Nile. At five o'clock to

S., where we at first halt at the right shore, before the bend to the left. Two large villages lie from half to three-quarters of an hour distant, and I see an immeasurable bare plain cracked from drought,—a summer shallow lake without any verdure. We go then to the left shore, the soil of which is less mixed with sand than that of the right, and gives us some hope of shooting and fishing. The huntsman Sale returned, however, disconsolate, for he had seen nothing at all.

The left shore is still more precipitous and higher here than the right one, because the stream forces itself into this bend. When we disembark, we find that the land again rises to a gentle acclivity, and we have the prospect of a large lake about three quarters of an hour distant, which overflows perhaps deeper into the Sobàt. Many lakes of this kind must be found in the country of the Dinkas, because springs, as in the Taka country, are not sufficient for the watering of the cattle of this merissa-loving, dancing and singing tribe; and besides, the drawing of the water would cause too much trouble.

The Sobàt is stagnant here in the proper sense of the word, and no log can determine anything else.

14th March. We navigate again on the right side, and go at half-past seven o'clock with libàhn from S. by E., immediately S.E., where the north-east wind remains contrary to us, notwithstanding the narrow water-tract. Some small and still green reed-huts hang on the shore, sheltered from the north wind: these are stations for hunters of hippopotami and crocodiles, or for fishermen, who, however, have gone away, and taken with them their working implements, for they

are frightened of us. The durra seems to thrive famously on the half-sandy shore, and rises cheerfully above the reeds ; probably it is sown,—that is, a handful thrown here and there on the vacant spots.

Eight o'clock.—E. by N., and N.E. by E. The upper margin of the right shore is planted throughout with durra, and some small fishing-huts shew that men dwell there. Ten o'clock.—Hitherto always N.E. within considerable deviations, and then N. by E. ; where we halt at the corner of the right shore on account of the wind, for the river goes still further to the left : level land above, some underwood, and a village at a little distance. A quarter before one.—N. by W., and about one, in a bend to the right. When the crew relieve one another at the rope, they imitate to perfection the Uh-uh-i-ih of the tribes on the upper part of the White Stream, and during the towing itself they sing the song à-à-à-jòk-jòk, which would be difficult for a white man to do. The force of the water is directed here against the right shore, which is without any crust of vegetation, and seems to ascend to the uppermost margin, as is proved by the gradations being washed away, and the thin layer of humus, one foot to one and a half high, decreases perpendicularly, whilst the lower part of the soil displays unmixed clay. It certainly required a powerful pressure of water to wash this primary deposit to such a depth ; the left shore, on the contrary, has a coating of slime and vegetation down to the water.

Two o'clock.—E. by N. ; twenty-one dhellèb-palms on the left, with a pastoral hamlet of thirty new straw-tokuls. The crew are beginning to shoot down the dhellèb-fruits, and I also disembark on the

shore, beyond which the ground, with the beautiful group of trees, is still imperceptibly elevated. We are quite comfortable there, but I gaze far and wide for a point to break the unbounded flat waste that shews not a thorn or a bush; the river winds melancholy between the naked shores. These palms stand in luxuriant growth,—a proof that the soil is capable of other things, and may look for a better future. The very pretty straw-huts present nothing worth having to our rapacious eyes, and near them we remark the sleeping-places, and a large, glimmering heap of dung, serving at night for fire and a bed. The cow-dung is collected in little heaps in the enclosure, surrounded with palings, where the beast is tied, and is still quite fresh: notwithstanding this, it is very certain that we expect in vain the return this evening of these beautifully spotted cattle. Standing on an old trunk of a tree, I remarked a large village on the right shore at a quarter of an hour up the river.

The dhelléb-tree has the same fibrous texture of bark, and of the interior of the trunks, as the dates and dome-palms; but it is far finer, thicker, and stronger. The outside of the bark shews rings from below upwards, and the tree itself shoots forth slenderly from the earth, and swells gradually towards the centre to a spheroid form, when it decreases again to the top, and rises stately, separating the head from the stem. The fruit is as large as a child's head, and in clusters, as in the palms before named, but on far stronger stalks, from which it hangs down immediately close to the stem. It is smooth outside, and of a golden colour, like its pulp; the latter is

fibrous, of a bitter-sweet taste, like chewing soft wood and leaves behind in the mouth an astringent taste, which may arise here from the fruit not being fully ripe. There are from four to six kernels in this gold apple of the size of a child's hand, or of those of the dome-palms: the stalk has a scaly covering, surrounding about a third part of the fruit. The kernels, or the nuts, have themselves a solid pulp, shining like dark glass, being exactly similar to that of the dome-fruit: at first it is like milk, but on coming to maturity becomes of the consistency of horn. The trunk of palms is surrounded with the same kind of rings as the date-tree, the rind feeling smooth, like planed wood; consequently it was impossible to climb these trees to gather any fruit, owing principally to the swelling in the centre, and therefore it was shot down. After several attempts, we drove large nails in the stem, to hold the rope by, and then we ascended gradually.

The bark falls off on the ground, as is the case with the other palms, for the tree throws out foliage like grass from the interior: the thick rootlets spread themselves in all directions through the ground, like polypi, with a thousand veins of life.

There seems to me to be no doubt that the Egyptian pillars, protruding in the middle, derived their origin from the dhellèb-palms, which might have been transplanted in the Thebais; for it was impossible that the Egyptians should not take notice of the unusual shape of this tree—they who borrowed all their forms and embellishments, even to those of their spoons and salve-boxes, from the kingdom of nature.

Lifeless figures having no meaning are never represented by them ; flowers, foliage, leaves, sacred animals, or parts of them properly introduced, are intermixed with hieroglyphics, like a garland, without beginning or end. The Greeks quickly seized what was beautiful in this, discarded what was heavy and confused, and pleased themselves and succeeding ages by lighter and more elegant forms. They placed the acanthus and horns, or volutes on the capitals of their pillars, and the Germans planted a stone-forest as the holiest of holy.

A large village of the Nuèhrs (judging from several potsherds) stood on our hill : this nation dwells up the river from hence and in the direction of the White Stream, where we had seen them last. I had found also on the last landing-place fragments and the foundations of a village, and heard from our blacks that the Shilluks, several years ago, had a great war with the Nuèhrs, drove them from these parts, and took possession of the lake abounding in fish, which I have previously mentioned. We have not remarked any sunt among the mimosas from the country of Bari up to the Sobàt, and even on this river, but we see talle. The latter tree has a reddish bark ; the long white prickles grow by couples ; the flowers are whitish and without any particular scent ; the bark, however, is used for pastilles, and, when rubbed, sprinkled on the merissa. It affords the best gum (gamme, semmag), which is white like that from sunt, while that from the sejäl (or sayäl) is blackish. Thermometer yesterday morning 22°, and did not rise beyond 27°, and this morning 18° ; noon 26° to 29°.

15th March. We leave our beautiful palms at half-past nine o'clock, and go from E. by N., and notwithstanding the strong north-east wind, slowly in the bend to the right. A quarter after ten, S.E. by E., then a very short tract S.S.E. : some grass huts of fishermen, and crocodile and hippopotami hunters at the lower declivity of the shore on the left. Half-past ten, to the left S.E., and further to the left, S.E. by E., where we halt at eleven o'clock, because an Arabian soldier has just cried himself to death before our cabin ! He wept at having to die in a foreign land and not seeing his mother any more. Nearly all these people lose their courage directly they are attacked by any illness, the nature of which they cannot visibly perceive as they can a wound, &c. He died with a piece of bread in his mouth, because the Arabs believe, and with justice, that so long as you can chew bread you will not die. It is shameful that we dare not take even medicine from the fine black physician we have on board, and much less can we expect assistance or salvation from him. Ten minutes have flown ; the deceased is carried to the upper part of the shore, and yet the worthy disciple of Clot-Bey has never even looked at him ! We leave at half-past two the place where the soldier was buried in dead silence, after having received five more cows, upon whom the crew fell like wolves, and navigate to the left, E.S.E. ; then again slowly to the right. Three o'clock, to S.E. We sail about five minutes, and stop again at the right shore, by the corner where it turns to the left, and then again, "Jo hâmmet, Ja mohammed !" is chaunted at the rope. In the winding below the left shore we saw a water-hunting esta-

blishment of seven straw tokuls. A quarter before three, from E.S.E. to E. by S. A quarter after four, E.S.E. Half-past four, E. Some few trees on the right entirely or partly withered, and soon afterwards a few green ones, of which those standing lower shew that the water has poured into the shores, even to the margin. Five o'clock, E. by N., then slowly right to E., where we halt at a quarter of an hour later. The river makes a strong bend to the right, and we hope to sail to-morrow.

This afternoon, when the cows were brought us, I procured a ring, with much difficulty, for sug-sug, and though badly manufactured, it is at least peculiar to the country. I saw several such rings among them, but not one of them had a circular form, and by this we may measure the standard of their skill. Those which are better worked, are found among the Nuçhrs. The five cows came from the Mek, who presented himself in person to Suliman Kashef, with whom Selim Capitan also happened to be: he was clothed in a ferda, which he had received from the Shilluks. He wore a very thick copper ring on his hand, and was of opinion that dress is the privilege of sheikhs. An old woman and a man preceded him; the former attired like an ancient Queen of the Witches. We dressed the mek in a red caftan, put a gay-coloured red handkerchief round his head, and hung glass beads on him. Another cow was brought to us, but they wanted an enormous quantity of sug-sug for it, (these trinkets are generally held in little value here, because the Gelabis frequent these regions,) and still more for goats and sheep. Thermometer, sunrise, 18°; noon and subsequently, 28° to 30°.

16th March.—Man is not appalled in the midst of danger itself,—if it were so, he would be lost ; but the frail human heart throbs afterwards. Yesterday evening I left the vessel, in company with Thibaut, to get at a swarm of finches, which birds are said to give a delicious flavour to a pillau, of which we wanted to be joint partakers. We were soon obliged to separate, in order to salute the birds on both sides of their settlement. In my excursion, however, on the shore, I came all of a sudden within a few steps of a lion, without having the least distant idea that this fearful enemy could be in the neighbourhood of all our vessels, and I had only my double-barrel, which was loaded merely with small shot ; whilst my huntsman Sale, was pursuing a gazelle, at a long distance off. Possibly our firing had awakened this supreme chief from his sleep, for otherwise I must have seen him before, although my eye was directed to a brace of birds at the left ; because the underwood could not have concealed an object of such size, as it only reached up to the knee, and was merely interspersed here and there with a higher bush. I was just taking aim slowly and almost irresolutely at the two beautiful birds, who were looking at me with surprise and confidence, contrary to the custom of the cunning finches, when the lion stood before me on the right, as if he had sprung from the earth. He was so close to me that he appeared to stand as high as up to my breast, but yet I stood, my poor weak weapon in my hand, holding it close to my side, with perfect presence of mind, so as to keep my face free, and to wait for the attack ; I was firm, and he seemed also to be resolute.

At first we stared at each other mutually; he measured me from top to toe, but disregarded the Turkish accoutrements and sun-burnt countenance, for my red cap which he seemed not to despise. I, on my side, recognized in him the dreaded king of beasts, although he wore no mane, according to his usual custom, but I did not appeal to his magnanimity. At last he turned his face from me, and went away slowly with a dreadfully pliable movement of his hinder parts, and his tail hanging down, but could not restrain himself from turning round to look at me once more, while I was trusting to the effect of one or two shots in the eyes or jaws, if it came to a contest of life or death; and really I remained standing immovable, with too much of the *lion* in me to tremble, and to bring certain destruction on my head by untimely flight. However, away he went, looking round several times, but not stopping, as if he feared pursuit, and I turned my back to him equally slowly, without even calling out a farewell; but I cast a searching look over my shoulders every now and then, right and left, expecting that he might make a spring like a cat, and I kept him in sight before me, when I was about to jump down from the shore on to the sand where the vessels and crew were. I confess openly that I now felt an evident throbbing of the heart, and that my nose seemed to have turned white. Taken unawares as I had been by the lion, the distance of five paces, according to the measurement I made, was nearly too close for me: on his side it was only necessary for him to have smelt me, which probably I should not have allowed. I stood a moment on the margin of the shore, in order that I might tranquilly

summon Suliman Kashef to the pursuit of the beast, without betraying any pallor of countenance, and then I jumped down on the sand. When I swore by the prophets to Suliman Kashef that my account was true, he was ready immediately with his sharpshooters. At my advice we formed a line of riflemen above, though I could not obtain a couple of bullets for my gun; but the Turks soon crawled together again, except a tall black slave of Suliman's, who was at the right wing. When the latter soon afterwards pointed and made signs that the lion was near at hand, his master motioned with his hand and gun that he would shoot him if he did not join us, for he held himself as lost, being left quite alone. We set off at a slight trot, because the lion continued his walk, until at last Suliman, as it began to get dark, ordered three of his boldest warriors to go in advance. Three shots were fired, but the men came back, and described the lion as a real monster. I was actually glad that the magnanimous beast, according to all probability, was not even wounded. They called me again an "Agù el bennaht," because I accompanied the expedition to see my lion a second time, and they expressed themselves rejoiced that God had preserved me, and wished me happiness, with pious phrases from the Koràn.

To-day we sailed at half-past six o'clock from the place to S.E. and S.E. by S.; at seven o'clock; E. by S., a village on the high shore at the right.

We saw yesterday, from our landing-place, four villages, lying together on the right and left shore, which the Dinkas have taken into their possession. At half-past seven o'clock, after we had sailed only slowly (two miles), owing to the wind being partly

adverse, we proceeded to E.S.E. and S.E. by E. The strong breeze caught the sails, and we make seven miles clear of deduction: unfortunately, the tract will not be long. A quarter before eight we stop before the corner, where a winding to the left commences, in order to go libàhn, because the vessels ahead do it. Some huntsmen's huts, with their inhabitants, stand on the right shore, and I procure, on this occasion, a horn of the Tete species of antelope. We proceed, sailing, to S.E. by E., and E.S.E., and halt a quarter after eight. Again at S.E. by E., to go libàhn round the left. Unfortunately, the wind has torn the sail, which I had feared for a long time would be the case; for it was ripped up in several places, and the Tailor Capitan did not trouble himself about it. "Allàh kerim!" A large village at some distance above. At a quarter before one, we go libàhn to S.E. by E.; then E.S.E. and E. by S. On the right shore a village with Dinka tokuls and sleeping-places. It is not yet, however, decided whether the Dinkas dwell there, although the style of architecture of the tokuls, their grooved and arched roofs, without eaves, seem rather to denote that they belong to this tribe than to that of the Nuðhrs. The wind is very strong, and the crew are obliged to tow with all their might; but the river winds now to the right, and we can, perhaps, sail. A quarter before two. From E. by N., slowly in the bend to the right: a village on the right shore, in the bend to the left, exactly like that on the left side. Half-past two, E. by S. We cannot see anything of the village here, owing to the high shore; and the blacks, who stood shortly before in large numbers on

the shore, have fled because they saw the Turkish countenances of Suliman Kashef's halberdiers. The Turk is pleased at such fear, which is associated with hatred and contempt on the part of the negroes. A quarter before three; S. by W. The wind makes the men at the rope run; but we are not able to sail, because the river winds immediately to the left. We have a low sand-island at our right. Our men will let nothing lie by the huntsmen's huts: tortoise-shells (water-tortoises), vessels, — such as gadda, burma, gara—everything is carried off; for the blacks have imbibed the Turkish notion of "Abit," and are now askari (soldiers), who pretend to know nothing of their countrymen.

Three o'clock. To the left in S. and S.S.E.; then again to the right. Half-past three. We sail a little S. by W. and S. by E.; a village on the left. The Dinkas appear to mix everything called corn to make bread; such as durra, lubiën of different species,; gourd or melon stones, &c., of which I have a specimen; and also lotus seeds, found here in great quantities, and therefore denoting that there are several lakes in the interior, and the small rice I have mentioned previously. A large hippopotamus shewed himself on the flat left shore: he was afraid of the vessels and the shouting of the crew, and trotted in a semicircle, like an immense wild boar, in order to plunge into the water with a greater roar. Four o'clock. To the left E.S.E. Five o'clock. From E. further to the left.

The crawling along these cheerless shores, notwithstanding the shouting, jokes, teasing, and stumbling on board the vessels from side to side, and sometimes

into the water, and the huzzaing when that takes place—notwithstanding all the various kinds of occupation and non-occupation which may amuse us for a short time—is exceedingly wearisome; and it is well for me if I retain my senses to sketch here and there an idea, which may be followed out or rejected by those whose attainments are higher, and who have the advantage of an enlightened circle, where opinions and views can be expressed and discussed. Such a circle, however, cannot be found in Bellet Sudan, or on board my vessel. We halt a little after six o'clock in E.N.E., at the right shore. Thermometer, sunrise, 18°; noon, 27° and 28°; sunset, 27°.

17th March.—We had a great antelope-hunt yesterday evening. Amongst others, there was an Ariel with twenty-five rings on its horns, and a Tete, and three female Tilli. The latter, also a species of antelopes, are of lighter colour than the Ariels, and almost white, whilst the Tete has a dark-brown coat with white breast and belly. The female Tilli are distinguished by having long tails, but the males are said to be bare behind. I was not able to leave the vessel sufficiently early to see a herd of more than a thousand antelopes that were going to the watering-place. My huntsman, also, who had struck into another road, saw some hundred together; all the others agreed that there were these thousand which I have mentioned. But they soon dexterously divided to the right and the left on the immeasurable level of this land, where there was merely low grass, wild bamie and a quantity of basil, which latter was also met with on all sides in the countries further up; and

Suliman Kashef only shot four, and my Sale not a single one. I myself could only see some antelopes on the horizon, because it was already getting dusk, and I stopped with Sabatier close to the vessels, in case some beast should be scattered from the herd, but in vain. On this occasion, also, I saw two lions at a distance.

At night the wind blew in coldly at the door and windows, and even this morning the north-east wind was cool. At half-past six we proceed E.N.E., and in a bend further to the right E. and E. by S., where we make a stronger evolution to the right. Eight o'clock. Libâhn from S.E. by S. to S. We glide over shallows apparently consisting of rubble-stone; the wind becomes strong and tosses the waves. A quarter before nine, S.E. by S. to S., then still more to the left, where we are soon thrown by the wind on the left shore, and stop in E.S.E. Thibaut is with me, and they are calling for him; his ship is full of water, and all the crew are summoned there: it is fortunate that we are near land. Selim Capitan neglected to have the vessels caulked at Khartûm, or to order at least gotrahm (instead of tar) to be applied to the parts which we had stopped up with some oakum.

At five minutes' distance above, a large village deserted by people; we are magnanimous enough on our side to keep the crew from plundering it. It is slightly elevated: the same is also the case with the shore, so that shallow lakes are formed right and left, at present dry, and having vents to the water, which apparently are kept open by human hands for the sustentation of the soil,—on which, however, nothing

is seen. A number of snail-shells are lying together on the surface just as I have seen in other places, and it seems that snails are eaten. We remain here on account of the accident to Thibaut's vessel, but the shores, *à talus*, do not allow us to bring it on the dry land. Thermometer 17° and 24°.

CHAPTER X.

VARIOUS SPECIES OF GRASSES.—FORMATION OF THE SHORES.—WATER-FOWLS.—AN ANTELOPE OF THE TETE SPECIES, NOW AT BERLIN.—STRATA OF THE SHORE.—THE SOBÀT RIVER. THE MAIN ROAD FOR THE NATIVES FROM THE HIGHLANDS TO THE PLAINS.—OBSERVATIONS ON THE COURSE OF THE NILE AND SOBÀT.—A THOUSAND ANTELOPES SEEN MOVING TOGETHER!—WILD BUFFALOES, LIONS, AND HYÆNAS.—AFRICA, THE CRADLE OF THE NEGRO RACE.—THE SHUDDER-EL-FAS: DESCRIPTION OF THIS SHRUB.—ARNAUD'S CHARLATANRY.—OUR AUTHOR FEARED BY THE FRENCHMEN.—ARNAUD AND SARATIER'S JOURNALS: THE MARVELLOUS STORIES OF THE FORMER.—THIBAUT'S JEALOUSY.—VISIT OF A SHEIKH OF THE SHILLUKS.—FEAR OF THE TURKS AT THESE PEOPLE.—SULIMAN KASHEP PURSUED BY A LION.

18TH MARCH.—We sail at a quarter before seven o'clock with a cold north-east wind S.E., and then S. by E. and S. The wind, however, becomes too powerful; twice are we driven on oyster-beds—that is, on those thorn muscles, as if over stones, and have reefed sails to prevent the ships from going to pieces, their condition being so bad. A quarter after seven. From S. by E. to the left. Visible sand-banks in the curve seem to block up our road, but we managed to pass by them on the right, with the assistance of the sails, close to the left shore towards S.E., and away in the bend to E. by S. Half-past seven. S.E. by E., and then a quarter before eight right round; six huntsmen's tokuls being near a sand-bank on the lower shore of the projection of the left side of the river.

We halt on the left by a shallow island clothed with low verdure towards S.S.W., and intend to stop here to-day and to-morrow to make observations, and the most needful repairs to the vessels and sails.

Suliman Kashef shot yesterday evening, at a gazelle-hunt, a large antelope, called by the Arabs Tete, in the foreleg, shattering it to pieces; the animal fell twice, but made off at last on three legs. Sabatier and I had chosen the left wing, and concealed ourselves with one of my servants in the high grass: the former fired and missed. The cracked earth displayed a magnificent soil: the grass, standing thickly in tufts, reached up to our breast, and was a great obstacle at the beginning of our rapid march. It was still green at the bottom, and the present desiccation of the ground, on which we remarked everywhere the traces of footsteps of wild beasts, and their dung, might therefore have only taken place a short time. This grass, narrow and three-edged, with cylindrical spikes, formed the principal produce of the soil. Less common was the grass similar to our species with flat two-edged leaves; it had knotty stalks like the three-edged, but a couple of spikes grew together on each blade (I have remarked this previously), which unfortunately were not yet at maturity, and therefore very small. The third species of grass consisted of slender reeds, cropped and sprouting anew, or trod on the ground. I perceived, also, some bamie growing wild, and birds' nests of grass hanging on it.

I had lost sight of my comrade; and although at the commencement of my excursion I had seen the vessels sailing up the river at my side, it soon became dark. Suliman Kashef, however, had the sagacity

on his return to the vessels, to order the reeds to be set on fire as signals, so that luckily I found my way back, though sinking every now and then up to the knees into the deep foot-prints of hippopotami close to the river,—a further proof that the shores, being only slightly elevated, form shallow lakes here at the rainy season, which are not dried up so soon.

I had taken a short walk previously on the left shore. The very same appearances of water remaining behind were visible, and I found muscles on the dry ground, amongst which were the *Erethria ovata*. Long traces of little deposits of earth, which, on closer examination, I discovered to be dams against the high water on the shore itself; and the alluvial reeds in conjunction with the muscles, make me conjecture that the Sobàt ascends over its shores here, as in many other places. Behind these low deposits lay an unlimited stubble-field on the other side of the village which lies on a gently ascending hill, elevated perhaps by the remains of clay walls, and stretching far beyond the horizon. The better kind of tokuls have frequently a roof, but the eaves only project inconsiderably: the smaller ones have a round form of roof, low sleeping places and reed-hedges being between them. Diukas are said to dwell there; but not a person, not a living creature, is to be seen. Thermometer, sunrise, 17°; noon, 28°; sunset, 26°.

19th March.—We all dine together in the open air, after an antelope-hunt. The island on which we are, is, properly speaking, a large broad sand-bank, about a quarter of an hour long: its somewhat elevated back is covered with verdure, and is connected with the shore on the right at low water-

mark. Purslane (Arabic Rigli) is found very commonly upon it; we see also numerous birds fishing in the many tongue-shaped segments of the upper part, and, in fact, sharing among themselves the narrow lake on the high right shore, close to which is a village, from whence the people have likewise fled. These feathered occupants seem to remove very seldom from this happy place. The antelopes presented themselves in great numbers; but Suliman Kashef's body-guard, though generally good shots, did not know the huntsman's custom of dividing and forming a chain, so as to catch the herd in the middle. I had no inclination, either, to join in such a surrounding of the game; for these Turks fire as if they were shooting in files, and their guns carry far, and are always recommended to the care of the supreme Alläh.

20th March.—Departure at a quarter after nine o'clock, with a favourable north-east wind, without sails, S.S.W. and S.W. by W., where, on the right, behind the high shore, a village lies in the bend to the left, and below it a broad sand-bank, on which some long-legged water-fowls are wandering about. We leave at the right side another sand-bank exactly similar to the former, throwing its shallows far beyond the middle of the river, and halt, S.S.E. at the right shore at half-past ten o'clock. Suliman Kashef's halberdiers bring eight antelopes, one of which I procure, being the largest of the Tete species. This specimen is now in the Zoological Museum at Berlin as a *nova species*.

The shores have widened here, and fall off in an angle of 45° to 50° : though they appear on this account lower, yet it is plainly visible by the steeper

places, that they always become higher. It is only below in the places where the river beats against, that the bluish clay is seen: the remaining part of the shores has, apparently, merely constituents of the same, as is the case in most places where the high water has not washed away the crust of humus crumbling from above and covering the base of the surface; for the original soil discloses itself immediately under the covering of earth, as is seen in precipices, and clefts in rocks caused by water. The river has also thrown or deposited thick layers on the shores. We must not be deceived here by observing various strata of earth mixed above and below with sand; this is a later alluvial deposit.

A pure layer of clay is never to be seen, however, in these tracts of strata, so far as I have remarked here and on the Nile. If it does appear, it lies either as the foundation of the whole, below on the banks of the water, as on the Nile; for all the ground there is alluvial and earthy deposits, gained when the high water is drawn off; or it rises, as in the Sobàt, with the talus of the shores to the surface, which is covered with a crust of humus. The Sobàt dug a bed for itself in firm clay-ground that resisted the water, and remained tolerably constant in the trench opened by it, without having altered its course, for no gohrs are seen on dry ground; but perhaps, in some places, it has flowed over its bed, and formed channels. On the contrary, the White Stream wallowed for a long time in the deep slime of an emptied lake, before it threw up solid dams, on which there are marshy forests, as on the old shores. This long valley-basin lies also on a layer of clay.

The Sobàt may be considered as a further boundary of the peninsula of Sennaar, and have given to the latter the name of Gesira. Certainly it has been, like the Blue Nile, a main-road for the tribes of the highlands of Ethiopia to the valleys of these countries; and this must have been especially the case because it has no accompanying marsh-lakes. Such nations could not have wound down from the mountains of Bari and the highlands there, by reason of the many marshes; for we are not to suppose that nomadic tribes can provide themselves and families with a stock of provisions for a long journey, or stow entire herds in their hewn-out trunks of trees (canoes); and it is impossible that the cattle could have been driven along the shore for their use.

The further I ascend the Sobàt, the plainer I perceive why the right shore just behind Khartùm appears higher than the left, and why I could not get rid of the idea that this oblique inclination of the land was in opposition to the course and the mouth of the Nile, but still might be explained. The deposit of particles of earth and sand can only come from above, and will always try to level and equalise the tracts of land which the Nile covers with showers of rain, brooks, and rivulets. It is clear that the surface is elevated by that means, and that, where these washed-away and liquid particles of earth reach a stream like the White Nile, they are carried down by it, without the other shore (the left side of the Nile here) deriving naturally any advantages therefrom.

The high mountain chain of Fàzogl and Habesh mixed, as I conjecture, its collective waters, owing to a breach in its partition-walls, and their slime and

morasses, and perhaps entire hills of decayed and corrupted matter connected therewith, filled depths in the lower valley on the side of the Nile up to the Delta—its most famous memorial,—and levelled the mountains of the neighbourhood, when Bertat, Dinka, and the country between the Sobàt and Bari rivers might have shot up in indomitable strength like artesian wells. Such catastrophes roll mountains and masses like a brook does its little pebbles, and throw up the water released from confinement in the cavities of heights which attract and collect it. A flood of liquid earth rolled then far and wide from the mountains without order and with numerous arms, but conformably to nature, the heavy particles sank. The water itself washed away, smoothed and levelled the ground. Therefore now we perceive those immeasurable plains on the Sobàt, whereon beasts cannot hide themselves, and which would be without shelter in the rainy season, if there were not mountains and forests in the neighbourhood.

Though it be mathematically proved that the great Nile runs in a channel as upon an ass's back, yet we find just the contrary in the White Nile; but the Sobàt even displays that phenomenon, although not at this moment, for its shores are emptied, except in the lowermost grade. They lie and stretch higher than the adjacent land, being heaped up by the waves of the river; they are, however, generally narrow dams, only appearing wide in the places where there are shallow lakes behind in distant connection, or overgrown gohrs, the grass border of which more easily withstands that deep washing away than these immeasurable plains, which might be called beautiful from their

splendid soil, if Ceres waved her golden ears, and Pomona offered shade and fruit. They shew, indeed, but little declination to the Nile, for which the Sobàt itself affords the best standard, being stagnant, and its shores only increasing in height here and there. The shores become higher, as on the great Nile itself; the less precipitous ones (although this is only local) are deceptive, as I have remarked several feet difference on the disrupt shore, and still more on the return voyage. I cannot divest myself of the idea that a lake has stood here also, or it may be that the surface of the earth from the region above to this, has been laid flat by the inundation, similar to the level fields of Egypt.

There is an incredible number of deer on the shores of the Sobàt, for I can add from my own conviction, so far as my eyes and ears do not deceive me, that I saw herds of antelopes at least a thousand strong—the Turks say from three to four thousand. About evening they shew themselves in immense lines on the bare horizon of the steppe, stand still, and approach—their tread sounds, in truth, like the evolutions of distant cavalry; at last, as soon as it is dark, they separate in the little bushes on the margin of the shore, to descend to the water. Hitherto I have not been able to seize this opportunity, because no one would remain with me on account of the lions and other savage beasts prowling about here, and it did not seem to me exactly safe, by reason of my close acquaintance with the lion and his just revenge, to lie alone behind a bush, and shoot some of the animals at a few paces off. My cook, however, has promised to accompany me on such sport, when we come again to a suitable place.

We proceeded this afternoon at two o'clock with sails in a south-easterly direction, and halted for the sake of antelope-hunting at three o'clock, at the right shore, E.S.E., before the curve to the right. Four o'clock: we sail to S.S.E., then a bend to the left, S.E. by E., where we stop again to hunt and also to remain. An antelope-herd of about sixty head was standing shortly before at a little distance on the shore, like a flock of goats, in harmless innocence and anticipating nothing evil. Wild buffaloes, lions, and hyænas were seen by several of our men: where are the holes and corners in which these beasts lurk? there must be mountains. Thermometer, sunrise, 15° ; noon, 26° , 27° ; from four to five o'clock, 28° ; sunset $26\frac{1}{2}^{\circ}$.

21st March.—We sail from our place at half-past six o'clock, quite quietly, without a drum being beat, and go E.S.E., with a cold north-east wind. Half-past seven.—From E. Libàhn: again to the left, E.S.E.; eight o'clock: and then again to the left at nine, N.N.E., where we stop at the left shore for sport, pretending that it is owing to the contrary winds.—Oh you Turks!

M. Arnaud now pays himself in skins, which he demands very freely for "son Altesse," but which he intends to sell in France at 500 francs the head. Eleven o'clock: we go with libàhn round a corner, and come to N., whence the river winds again slowly to the right, N.E. by N. and to E., where we are driven forward and indeed without sails. I remark here that the lower border of the river is rocky, with a layer of soft stone under the clay, from which it may originate, and appearing to be limestone formation,

until we break off the deceitful exterior, and the apparent corrosion by the action of the atmosphere turns out to be alluvial deposit,—the clay, however, remaining sticking to the hands like sand. One o'clock: E.N.E. All the vessels bear up! Four o'clock: three reïs had been sent forward with the sandâl to sound the water, and the men were honourable enough to express their conviction that there was still a watercourse: we shall get now regularly fixed upon every sand-bank. I, for my part, would like to make yet a good way, for I may stumble perhaps upon a firmer foundation of stone or something else new. We proceed, therefore, further,—against Mohammed Ali's will, and certainly against Ahmed Basha's, who may be very much in want of vessels and men at this moment, without any invasion on the part of England or France. E. by N., and we squat again. A quarter before five o'clock: S.E. by E. Water is on the right, but we cannot get there because the bed of the river is elevated in the middle, and these banks are magnificently larded with the spiry Conchylia, which would deprive the vessels instantaneously of their beautiful caulking. The reïs are sent out again in the sandâl; everyone is in doubt what is to be done. Suliman Kashef and Selim Capitan want to return. An island lies in view above. I should like to be there to make observations, but that cannot be. Thermometer, 17°, 28° to 30°, 27°.

22nd March.—Suliman Kashef sails back for the sake of the chase; two other vessels follow: obedience seems renounced. I go to the island and shoot two antelopes, dark as it was. No artifice, such as I have already related, was necessary in this neighbourhood.

23rd March.—We set out indeed at seven o'clock in the morning for the return voyage, but stop soon again, notwithstanding the favourable wind at the right shore, because deer are seen close to it. The Sobât and the Blue river might be conduits for the high land, like the Tigris and Euphrates, Indus and Ganges were for the valley-land, made subsequently fit for the nourishment of nations. Tradition and history up to our time, teach us that Nature was not powerful enough, and perhaps did not wish it, to form everlasting barriers between nations, whether seas, rivers, or mountains; for the destination of man is perfectability, which can only be attained by mutual commercial intercourse.

Was Africa, therefore, although in the same latitude as other countries,—for example, Arabia,—exclusively created for the black species, who, so far as I have had experience of them, will never leave the low grade of intelligence in which they have been for so long a time, until they come into a closer and more continuous association with whites? Anthropophagy, indeed, makes the Nile the partition-wall between Asia and Africa, instead of the Isthmus of Suez and the Red Sea. Our Sobât (as also perhaps the White river, unless the black people from below ascended here after the drying up of that part assumed by me to have been a lake, which may be almost taken for granted if we consider the affinity of languages from the Dinka country to Bari,) drew down probably only a black race,—a younger stem, I conjecture, than that of Caucasus,—between which and the nations of the Nile there is a total difference in colour and manners.

Habesh, like a second Cashmere, might be the cradle of white men ; no less than Arabia, lying opposite, which has nourished perhaps the same species, but burnt by the sun ;—and if a black race shot up here instead of the white, the rivers of High Asia that disembody on this side were large enough to import white people. The Red Sea and the Persian Gulf must, indeed, at the very earliest time, have formed nearly insurmountable obstacles, if antediluvian ship-building, even without Noah's ark, had not brought about cultivation, and caused the necessity of exertion and the desire of emigration ; and who will answer for it that the Red Sea was not at one time a Tempe, so that an excursion to Africa might have been made under the shade of rose and orange trees ? The divulged coasts, the washed-away sharp rocks of the dangerous shallows, and the submarine mountains, might easily indicate that there was once a small irruption.

Habesh might have been the real mother country of Nubia and Egypt, by means of the fecundation brought from Asia. Nuba negroes mixed with the whites, and became masters of the country, until they were forced back to their mountains in Kordofân,—still remaining a pure race, and nothing being left of the whole Egyptian policy but circumcision. The black nation on the Nile might have been separated from that in Habesh by a cordon ; and both of these tribes preferred, on cultivation increasing, a comfortable life in the city to the free one in the mountains, until the Romans connected again Habesh and Egypt, and built Axum.

The shores of the Sobàt have hitherto been with-

out wood ; but I saw, upon the shore behind the island just left by us, a row of trees, said to be Döbkers, and probably were so ; for I recognised the little solitary shrubs, in which I and my servants had groped about till late at night, to be young shoots of Döbkers, which seem to have sprung up this year at high-water ; and also nebek and telle. I found water-thistles on the shore above in unusual abundance, and collected also that clay which appeared to me previously to be a layer of stone. It was not quite free from fine sand, which the water had washed on the shore, and exhibited, therefore, a rough, stone surface, without being so yet. But where it lay piecemeal about the shore it was as hard and black as stone saturated with water, and dried or burnt by the sun, for that luminary has the power, with the assistance of rain, of vitrifying rocks ; and we have seen ourselves such greenish ridges and blocks in the Nubian deserts.

According to Girard, the specimens I brought from the shores of the Sobàt consist of a micaceous sand, dark-brown, ochrous clay, chalky sand, and partly of a conglomerate composed of small fragments of limestone baked together by the sun. The sand, where it is pure, consists of several little yellowish grains of quartz, a small portion of reddish feldspar, some brown iron-stone, little brown tombac-mica, and a black mineral consisting of small grains, the nature of which could not be exactly ascertained. These materials indicate that the origin of the sand is derived from a mica-slate and gneiss mountain not far distant ; for if the sand were far from the mountain whence it originated, it would not contain coloured mica.

An incredible number of potsherds were found below on the flat shore which is deserted by the river. I thought to pick up pieces of brick, but I soon discovered that they were fragments of that kind of murhàka which the Shilluks bake from the mixed mud of the Nile, owing to the want of stones. I did not discover any remains of villages on the shore; they appear, however, to lie upon the high gohrs, and the pools arising therefrom, as if upon the primitive shore. These gohrs of the Sobàt running parallel, and lying actually twenty feet higher,—at times, also, displaying higher dams or shores than the river itself, indicate moreover that the river in its young days flowed wider than it does now, without deviating from its direction, so far as I have hitherto observed. I had an opportunity of convincing myself of what I have stated above, at the village in the neighbourhood of which I was shooting, and where I saw two ostriches. Nevertheless these potsherds are testimonies either of a previous and considerable population of the surrounding country, and even the hill covered with shrubs above the potsherds might have supported a village, or that more people dwell above than we should have supposed; and the pieces of murhàkas may be a sign that neither stones nor mountains are near at hand, and that the arts did not flourish; for all these fragments were of rude origin. We have never discovered traces of any finer vessels of terra-cotta, or pieces of glass, enamel, or delft ware, such as we find in Egypt.

When the antelopes come to drink, for which they have room enough,—for instance, yesterday evening—on the extensive plain, they appear drawn up as if

in line of battle, but run away like a flock of sheep—yet not so close together—as soon as danger threatens. These animals, so numerous here, might be easily tamed and fed by the hand of man, if arms did not prevent such friendship; the lion and hyæna, besides, keep them in constant fear and trembling, and take a tenth part and more of them, in spite of all their innocence, as we have seen by the remains of saraffes and gazelles. Perhaps, the great lord of beasts, with whom I came so closely in contact that it was only necessary for him to make a spring, to set his teeth in my bit of Adam's flesh, had made such a feast on venison before we met.

It is surprising that I have not hitherto seen any mouse-holes or mole-hills; the inundation and rains may be the cause of this, and we have not gone from the river into the interior of the country. The Schudder-el-Fas (axe-tree, *mimosa sensitiva*?) common in Bellet Sudan, is seen on the shore itself,—a shrub spreading like brambles, with small delicate acacia leaves, a similar sort of pods, flesh-coloured button-flowers, and barbed thorns. If its twigs be touched with an axe, or a knife, or merely knocked with the finger, its leaves immediately close (from fear, as the Arabs say) as if they were withered. I have not yet been able to procure ripe seeds of this shrub.

M. Arnaud makes a section, but not where the water running upon a shallower place allows a more accurate calculation to be made, but there where the river is full,—namely, in these basins, in which the water underneath is stagnant, whilst that on the sur-

face moves as slowly as we have seen the Atbara, which has the very same deep basins. The public will therefore read of a mighty mass of water, said to be carried by the Sobàt to the Nile: the breadth of the river amounts here, as below, to one hundred and thirty mètres.

The section is therefore made, and we proceed at noon. The strong wind breaks in two the sail-yard of the vessel commanded by the Arnaut, Mohammed Aga, because Selim Capitan paid no attention to it, though it was rotten,—and so was the whole vessel.

We land afterwards at our peninsula or sand-bank, where there is a settlement of six tokuls. The poor inhabitants of these little straw huts were perhaps those whom Thibaut observed when setting out from hence, and who covered the whole island like a swarm of flies; whereupon he slily retreated. I rather think that my European fellow-travellers are afraid of my being an eyewitness of their doings and acts, lest I should accuse them of falsehood, or laugh at them when they exaggerate some small circumstance, or pretend to have seen wonders, and gone through frightful adventures with courage: and yet they give all this out of their journals to their attentive listeners. It is really as good as a play to see them. Arnaud and Sabatier have separate cabins in the same vessel; and, as soon as one has gone on deck, ashore, or on board another vessel, the other tries to find out the hiding-place of his journal, in order principally to read what is said of him. If Arnaud abuses Sabatier, the latter gets in a rage; but on our persuasion rests satisfied with threats, and sits down and writes against

Arnaud in his journal: then he leaves it carelessly lying about, and goes away directly Arnaud enters, and the latter, immediately his back is turned, seizes it and reads it. Thus they read their notes and diaries in secret, and then I have the pleasure of hearing all about it from Thibaut and Sabatier, who come on board my bark.

Though Sabatier and Arnaud have related the history of their hunting two little marafills, the latter has not hesitated to write down that he came close upon two lions (whereas he only saw two hyænas running at a distance, whom Sabatier observed at the same time), because he is jealous, as his countrymen tell me, of my chivalry with the lion. He describes, also, antelope, lion, and crocodile hunts with similar Münchausen stories.

Our tokul inhabitants seem to have gained a little confidence, although they do not shew themselves, for they have tied up a sucking-calf close to their huts, which Suliman Kashef takes immediately into his possession. We have here a proof that the water is still falling, which I had not previously thought: this was the case in the peninsula to the extent of a foot, and we shall be obliged to go over the nearest oyster-bank, after we have remained here half a day, or perhaps the whole, to make the Arnaut's vessel again in proper sailing trim. Thermometer 16°, 27°, 29°.

We find here, near the Sobât, that the impregnation of iron oxyde, which is frequently so strong, is only in the earth brought down from above, in all the humus, and also in the coagulated layers of sand under or between the humus, but not in the drifted sand. There is

no trace of it in the clay; it is therefore perhaps a primitive deposit,—the lime or cement of the ancient world. From this appearance of iron oxyde, which is not inferior to that on the upper part of the White river, the Sobàt might provide Bellet Sudàn and Egypt with iron, if the protecting hobgoblins of the mines be first driven away. Whether the Sobàt leads to gohrs of gold would be worth investigation, but the sand of this region has not the least appearance of it. For that very reason Arnaud is projecting an immediate expedition up the Sobàt this summer to the gold sources. Oh enviable Viceroy of Egypt, around whom charlatans of every kind have drawn a line, within the circle of which no one can penetrate but Italians of similar calibre, may your eyes be closed against gold-dust! At noon we set out from our halting-place, partly with libàhn and partly sailing, glide here and there over oyster-banks, and soon stick fast again on the sand.

25th March.—Sate Mohammed and Sale lay down yesterday to sleep close by, instead of going to shoot. I felt hungry, and had not prepared anything: the cook gazed stupidly in the distance; and I was obliged to eat soft biscuit and drink water. No sooner had I taken this than I felt unwell, and continued so till this morning. Thibaut seems to be possessed with the most trivial jealousy; he cannot understand, like all the rest, what I have to write so continually. The old monotony of the shores has hitherto continued. Only this morning two groups of naked Dinkas shewed themselves on the shores, without running away from us. They brought even

goats and sheep with them; but we sailed by, and halted at noon near the dhellèbs, where several groups of fishermen's huts stood here and there on the shore. Thermometer 17° to 30°; sunset 28°.

26th March.—The wind is favourable; but Arnaud wants to renew his sections, in order to make the world believe that the Sobàt gives more water than the White river. He is fishing about, therefore, in the deep places, and a fall has made its appearance, which was invisible to other eyes. Yesterday evening I said to him, accidentally, that I had an attack of fever the day before, accompanied with vomiting and diarrhœa. He immediately complained of his health, and said that he was suffering under tertian ague, and dropped a hint that Khartùm was very unhealthy, in which I agreed, experience having taught me the same; but I saw clearly what he meant—he intends to play the invalid, and will certainly become worse in Khartùm itself, so as to induce the Basha to let him go to Metemma, where he will find more lucrative work in examining the ruins there than in composing his map. He eats and drinks, however, like men in good health—is active on his legs, even when there is nothing doing—shakes his round head, talks to himself, lays his finger on his nose, and looks first to the sky and then to the ground so quickly that his straw hat, adorned as it is with a large knot of ribbons, in the Tyrolean style, flaps up and down. A Turkish under-cap and this hat cover his partly bald head, on which he has let a pig-tail grow, to make up for the loss of his hair at a future time. He stands still, and then sets off run-

ning : we call him, but his profound meditations will not allow him to answer. The Turks say, in short, that he is *magnuhn* (crazed). His usual expression to the others, "*Je le sais tout*," is worthy of a man of such varied acquirements as he pretends to be ; but he does not dare say so to me. When the time comes that he puts on the appearance of sickness, he orders Thibaut to be summoned, and makes the latter understand, if he does not perceive directly the illness of his lord and master, that he is unwell, and not inclined for work, and therefore wants to have a little chat with him. Thibaut sits down very quietly, yawns now and then, and answers "*Oui Monsieur*" to all his remarks, and thus are the rays of these great minds reflected. But Arnaud truly is an all-comprehensive genius ! After he has spoken a little about the way to make money, &c., it pleases him to fall into a kind of somnambulism, which will be attributed subsequently to feverish delirium—talks some hodge-podge about constellations and declining spheres, which he means, however, to put in order, and then all at once turns the conversation from stars to his property in the moon, or to a royal princess, whose favours he has refused—all in most beautiful harmony with what he tries, at other times, to impose on the world. During all this scene Sabatier sits in his cabin, and is nearly bursting with laughter. "*Relata refero*."

We navigate part of to-day with a good wind, and may, therefore, easily reach the Nile. The more I ascend the Sobàt, the more I am convinced how the shore and land fall away towards the Nile ; and yet

the former appeared to me high at first, without, however, being much higher; but then we came from the Nile, which is shoreless. The Sobàt on the tract navigated by us is like the shore of the Nile near Kàhira, and the more ancient high shores in Nubia. The greater gradation of its shores at a distance indicate a chain of mountains in the neighbourhood, or an unusually strong falling away of the slope in the highlands, which is certainly not far distant.

That the Sobàt should still retain its old channel when on the point of discharging itself into the Nile, as it seems to do at the upper part, is very improbable, because I saw to-day from the deck merely a gohr on its left side, at the end of the forest above, and perhaps flowing into it as usual at high water. Moreover, the alluvial soil at the lower end of the Sobàt was contrary to the nature of such soft deposits, and very certainly belonged to that which I have considered a Nile lake, the reach of which might always elevate the Sobàt sufficiently high. The undulating ground extending from the river, and running parallel to it, displays still furrows caused by the marshes having ebbed away, and the Sobàt, rushing over it afterwards, flowed without opposition wherever it liked, and might even have separated into several arms.

27th March.—Yesterday afternoon we arrived at the mouth of the Sobàt, and remain here to-day to make observations; but if the strong north wind do not change, we shall not be able to advance. Yesterday evening another man was carried dead from our vessel, who would not eat, and drank nothing but

water from the Sobàt. A species of marsh hyacinth, having scent, was found by Thibaut. It has little bulbs, but spreads and increases by shoots from the root. Arnaud, who is never at a loss for a name, declares that a beautiful water-bird, with perfect web feet, which we remark, is the Phoenix.

The Shilluks came this morning from the opposite shore, and asked us to barter with them. This afternoon a Sheikh came to us (unless he was an impostor, as the one on our ascent was) and invited us to come *without fear* to their city, which was close at hand, and said that cows, poultry, &c. would be brought to us. He himself presented us a cow, for which we gave him a ferda. At four o'clock we were able to proceed with oars: we navigate to E. and E.N.E. The shores are surprisingly elevated since we were here, and a considerable drainage of water, probably the last one, seems especially to have taken place within these few days. The Nile is not broader here than the Sobàt. Dry grass—reeds at the right; large hillocks of decayed ant-castles at the left. Five o'clock, N.E.; the foot of an island on the left, behind which the river becomes broad, and a group of Shilluks are stationed there on the ground, whilst further below they have taken possession of the ant-hills, and stand in the form of a pyramid. The Turks are dreadfully afraid of these people, and say that they are "batalin" (bad), because they are aware that the Shilluks know them well. Feizulla Capitan has had a number of cartridges made for his pistols, and Selim Capitan wears his thick white woollen trousers, and not without cause.

Soon after five o'clock we stop, conformably to the wisdom of our high dignitaries, at the uninhabited right shore, which is considerably higher than the left, and belongs to the country of the Dinkas, whilst the Shilluks appear to possess the mouth of the Sobàt, although not protected by forts and guns. Suliman Kashef was pursued a few days ago by a lion, notwithstanding he had four halberdiers with him, but he happily escaped the danger. To shew his gratitude to Allah, he gave every one of his crew twenty-five piasters.

CHAPTER XI.

THE SHILLUKS, A VITIATED PEOPLE.—CAUSE OF THE VIOLENT RAINS IN INNER AFRICA. — REFUSAL OF THE SULTAN OF THE SHILLUKS TO VISIT THE VESSELS.—DESCRIPTION OF A SPECIES OF GRASS.—BARTER WITH THE SHILLUKS.—CONQUEST OF THEIR COUNTRY NOT DIFFICULT. — FORM OF THEIR BOATS. — AMBAK RAFTS. — IRON RARELY FOUND AMONG THE EGYPTIAN ANTIQUITIES. — WORSHIP OF TREES BY THE SHILLUKS: THEIR RELIGIOUS RITES.—STARS IN THE SOUTHERN REGIONS OF AFRICA. — SHILLUK WOMEN: THEIR DRESS. — REFUSAL OF THE MEN TO SELL THEIR ARMS. — THE BAGHÀRAS: THEIR DRESS, ETC.—RE-APPEARANCE OF THE ISLAND PARKS, AND MOUNT DEFALFAÜNGH.—ASCENT OF THIS MOUNTAIN, AND FULL DESCRIPTION OF IT. THE DINKAS: THEIR LOVE FOR OLD CUSTOMS. — DESERTION OF TWO DINKA SOLDIERS, AND REFUSAL OF THEIR COUNTRYMEN TO GIVE THEM UP.—SHEIKS SEIZED, AND DESERTERS RECOVERED.

28th March.—We navigated to the neighbouring island, and passed by it on the left, N.E. by N., just as the sun was rising. Where is the meat that was to be put to-day into the Egyptian flesh-pots? The Shilluks will be delighted at having tricked the Turks, for they are really an extremely vitiated people. According to nature, corruption of morals cannot take place in the very earliest stage of life, and there might have been, therefore, a previous cultivation here which has now disappeared, and left only the bad parts behind. But how could they have gone back to the naked state? Slight clothing is even necessary here: a people that has once worn a fig-leaf never

throws it off, although a cynic here and there may choose to lead a free dog-life.

We labour with oars, yet all is in vain against the north wind; the river itself remains on the average N.W. as far as Khartùm. About nine o'clock we halt at the right shore, and see herds and villages of the Shilluks opposite to us; but we must make our appetites disappear again—" *Quid juvat adspectus, si non conceditur usus!*" Really it was very vexatious; and in addition thereto, the new moon has appeared for the last two days, and yet my bold countryman whistles and roars, which is so very unusual at this time that we conclude the same phenomena is taking place on the Nile.

It has been considered as a thing decided that the periodical north winds blow the rain from the Mediterranean Sea against the mountain terrace of Habesh. But these are winds which blow also on the Western Ocean, along the coast of Africa, and find no opposition on the sea and further beyond: the periodical gales cannot ride at anchor so conveniently on the not very high mountains of Habesh and last until the counter gust from India ensues, or until the clouds have impregnated all the air of Habesh, and at last fall, from their weight, and bring refreshing rain to the country. The Mediterranean Sea seems to me to afford too small a tract for the sun and wind to be able to draw a mass of water from it, like that of a small deluge. Therefore, I think that quite different phenomena lay the foundation of these violent rains, and that Habesh, beyond the equator, may have its conductors of moisture from the Indian

Sea, as well as Egypt by the electrical course of its Nile. Otherwise Habesh would be enveloped in an eternal sea of clouds, for the north winds would be bottled up there half a year, and, by the same argument, the south winds the other six months.



MOUNT LINANJIN, FROM THE ISLAND OF TSHÀNKÀR, TOWARDS SOUTH EAST
27TH JANUARY, 1841.

According to my views, therefore, the north winds pass over the mountain of Habesh, which if we take Sennaar, or rather Fazògl, as ten thousand feet high above the Mediterranean Sea, ought to lie in analogous elevation, but which assumption, however, does not appear correct, if we look closely at the mountains of Fazògl. It may be, then, that the ascent of the ground from the Mediterranean to Fazògl fills up two-thirds of this height, which may or may not result from the slight fall of the Nile. General experience teaches us in Germany, that the west wind, as a rule, brings us too liberal an allowance of rain. That fountain of ours lies toward the west, in the ocean : accordingly, the ocean might provide, perhaps, the valleys of both the Niles and their neighbourhood

with similar rains, at periodical winds, the uninterrupted effusion of which during the hariffs (rainy season) may be derived from other causes, and perhaps may be sought for in the monsoons.

I found the tokuls of the Shilluks slightly arched: but just now I see a few higher vaults, somewhat like the Italian cupolas. They are too high to be called Roman arches. The Romans might have derived their arch from the sky; the Italians adopt the oblique form: every part ought to be light, slender, and tending towards the centre. The tokuls must be considered as the oldest buildings in Africa. Continual rain necessitated good and secure covering, and a sheaf, tied at the top, may have suggested the first idea of a tokul, for the violent showers of rain pierced through the thick horizontal layers of reeds and straw. Thermometer, 19°, 29°, to 30°; sunset, 28°.

29th March.—After the north wind had somewhat abated, yesterday at noon, we pushed on with oars and the rope, and halted on the evening at the right shore, near the Dinkas, where a village was to be seen close above, from which the inhabitants had fled. A hillock extended along the river, resting on a down of the finest white sand; and this sandy deposit being covered entirely with dome-trees, mostly young ones, is perhaps the cause why the river is not half so broad towards this side as previously. The long hollow behind the shore, up to the neighbouring old shores, displays a scanty forest, intersected by two arms of the Nile, which, for the moment, are stopped up above and below. I found, on one dam of earth, re-

mains of a village that had stood here previously. Our crew did not lose the opportunity of setting them on fire, without thinking of sparing the young dome-palms. The proximity of lions is now alleged as the excuse for the necessity of fires, although we have seen none since those on the Sobàt, always excepting the ones described by Arnaud in his journal, whom he attacked chivalrously, with his Fortunatus-cap.

The direction, yesterday, in which we navigated, deviated more northerly from N.E., whilst to-day we go N.E. in more easterly declinations. The north-east wind is therefore against us; but we are happy at having escaped from the confined talus of the solitary Sobàt. Our left shore presented us yesterday, and to-day, dhellèbs and some villages in the most charming situation, two of which I sketched, and afforded us continually the sight of a green forest, whilst the right shore displayed only a bare tract and several villages of the Dinka country, concealed from us previously by the high reeds. Dinkas and Shilluks hold the points of their broad spears directed towards the ground, according to the custom of the nations above, and do not throw them, probably as a sign of their friendly intentions. The spears are decorated at the extreme end with a little bit of fur or pelt, which, perhaps, is of the same use in the javelins as the feathers of arrows among other nations. The Shilluks and Dinkas have not any bows and arrows; and the latter weapon, which is entirely without feathers in these regions, was no longer seen after we passed the Nuèhrs, who dwell up the river. We halt in the afternoon, firstly, at the shore of the

Shilluks, near a little hamlet, close to which is the capital or residence-village of the Sultan of the Shilluks, whom we had invited even before we left the Sobàt to honour us with his presence, so that we might present him with dresses and other beautiful things. But he preferred to remain where he was, and perhaps removed further, or intended to send us an usurper of his name, as he did the last time.

When we landed, inquiries were made for what peculiar reason we had come there—whether with friendly or hostile intentions; and one messenger after the other was sent to us, to know whether we wished peace or war, because Turks had *never* before presented themselves in this place. It was no answer to them to say that our object was merely to navigate and survey the river; and the Mek did not appear on the scene, still fearing, perhaps, treachery—nay, even kidnapping. I should like to see, however, the faces of the *good* Turks, if the Sultan, who they suppose is afraid of them as the conquerors of the world, should appear all of a sudden behind the suntrees, with a suite of some thousand broad lances!

Those trees have astonished me by their strength, being about four feet in diameter, and by their powerful and now shady branches. The bark of the lower part of the trunk and the stronger boughs is of a dirty dark-brown colour; and the latter, together with the smaller branches, are like those of the linden-tree. The small prickles are seen only sparingly on the boughs hanging down, and the whole present strength of the trees, which have been deserted by the water since our ascent, seems to lie more in the

crisped and delicate foliage. The grass, which rose previously so luxuriantly from the water, lies now like a thick layer of straw; it appears to continue lying on the ground like the couch-grass—yet not in the proper sense of the word, for its roots are those of grass,—and, from time to time, to strike root, and also to stand up, if it has not been kept too long upright by the water, and its slender stalks have not grown too high. I have remarked this in many places, and seen both these species at the same time upon the very same root, the blades having been cropped every now and then, growing crisply, and standing upright on all sides; it might be, therefore, the savannah grass, and therefore I secured a specimen of this grass.

I have not been able to ascertain whence the Shilluks and other tribes derive the little rice, which is also a species of grass. A specimen of the fruit is also in my possession; it comes up, perhaps, like wheat. The Shilluks do not seem to be very much afraid: they are ready to engage in barter, although they do not come quite close to us. Perhaps they think to drive us away first, by not supplying us with meat.

30th March.—There was an *enlightened* assembly yesterday evening, on board Suliman Kashef's vessel: all the lanterns of the Turks were lighted, and were fixed around it. There is nothing done now without light; we are recalled, therefore, from the chase by lanterns, even if it be only dusk. I proposed, yesterday, either to present ourselves *in propria personâ* to the Mek, at his residence close by

(said to be only two hours distant), or to receive him in the open air, if he could be persuaded to come, and not to invite him on board the vessels, according to the favourite custom, because in that case, he might probably turn back. They agreed with me, and—there the matter ended. The boats of the Shilluks exceed in size and solidity those of all the other tribes. This people also frequently place two trees together, and bind them together at the bottom by ropes. Their boats have long peaks, and carry twenty to thirty men, sitting in a line behind one another. The different colour of the bark of the talles—I had seen them previously red, and now of a palish green—seems to depend on the nature of the soil.

The royal cranes, so often mentioned, are in extraordinary quantities here, and we provide ourselves abundantly with them, but got very few other birds. They keep together in flocks, and walk now on the dry old river-bed, which consists of the most fruitful earth, and extends at two hundred paces distant from the Nile. This ancient, flat, and choked-up bed of the Nile, being subject to inundations, is perhaps the place between which and the country beyond the vigorous forest was planted; for I remarked yesterday, that the forest stands more under the horizontal line than on the rising of the shores.

Just now Fadl and Sale came from the Shilluks, some of whom have encamped at a tolerable distance from the river. I did not accompany them, because the natives would infallibly have gone away again, if they had seen a white countenance, as that is connected in their minds with a Turkaui. A broad

spear could not be procured from them; they said that every one had his spear, and ought to keep it: moreover, they gave my men to understand that their Mek would not appear until we had also a sultan on board, and that we ourselves had come to their land as spies. Two of them were tolerably conversant in the Arabic language, but very few of the others understood it. One of them possessed a small elephant's tooth, as my servants further related, but the glass beads I had given them were not sufficient to purchase it, nor a sheep. They do not despise ornaments, and were presented with abundance of white, thick glass beads (the blue are not esteemed); but they prefer, however, objects of real value, and wanted, for example, half a ferda for the sheep. They said that they were frequently visited by Gelabis (slave-dealers, merchants), and that even the day before yesterday, they (the Shilluks) had been visited by some of them, who had come from Khartûm on camels, and brought cotton goods, ferdas, beads, &c., which they had exchanged for cows, teeth, honey, simsim, and kurbàks. A cow costs a ferda, and such a piece of cotton stuff is valued as money, for we never see them clothed in it.

It is a striking circumstance, that a merchant is esteemed by them almost a sacred person; however, I would not recommend any white man to undertake this business here, if he does not wish to be murdered as a *much-beloved* Turkau.

31st March.—We leave our landing-place at three o'clock, without having seen the sultan of one of the largest, if not the very largest nation of the White

Nile. Another fellow, however, who came, pretended to be the Sheikh-el-Bellet (according to him, a son or relation of the sultan and his envoy), and was presented with pearls and a piece of calico conformably to the Turkish policy. We halt for the night at the left shore. A very large number of black ibes are remarked on the trees: their flesh has a fine flavour.

1st April.—Now that I know something of the country of the Shilluks, which on the whole, perhaps, only amounts to a tract of shore, the conquest of it, as well as of the land of the Dinkas, does not appear to me very difficult from this side, even if the Shilluks were determined to offer real resistance. The army could defile (that is, in the dry season) along the shores up the stream, and cover the rowing-path, which is necessary here, owing to the south winds, and the vessels could carry the provisions; there is no Haba either to fear here, as in Taka. Certainly such an expedition would be only to press soldiers, or perhaps also to subdue the whole country; for as to other treasures, they are not to be acquired, except the large herds, from which the future tribute might be drawn. If Ahmed Basha, however,—for I have him in my eye,—could once raise an army of these black devils of Shilluks and Dinkas, whom he himself allows to possess the greatest courage, *then* he might think of other and more profitable conquests.

That broad, choked-up gohr, of which I spoke previously, seems to continue, and perhaps does so always with the old high shores, which, however, may be distant enough. They are now invisible on both sides, and the new shores are mutually of the same

height as they have been for some days. Notwithstanding this, I must still assert that the Dinka land lies higher than that of the Shilluks, and that both the barrenness of the former and the dense wood of the country on the left shore are derived from this cause. On the other hand I have altered the opinion expressed on the ascent, that we ought to keep in view only the old or high shores, in composing a map; although it would be extremely instructive to mark them on the charts, for the present shores are high enough here at least—about five or six, and up to ten feet at our landing-place—to be considered as shores.

We make the bend from N.E. to E., and the Gebhel-Dinka or Defafaùngh seems to peep forth down the river before us, but it is only a delusion. The villages, or rather the long-tailed city of the Shilluks, Jemmati, Gennap, called by the Arabs therefore perhaps Dennap, advances with its groups of houses and forest to the margin of the river, and crowds of people have collected shortly below our landing-place. We halt at the left shore a little before sunset, which is at present charmingly decorated with grass and trees; the former, however, only below on the flat strand.

2nd April.—Some Shilluks from the neighbouring village were on the shore, but drew back a short distance when they saw me coming. I had experienced a violent perspiration in the night, for we had yesterday evening 30° Reaumur in our cabin, where not a breath of air was stirring, and therefore, being in a perspiration, I had just now thrown over me my burnus, under which certainly a gun might be very

easily concealed. The Shilluks are not generally timid, especially if they be in a body. It were, in truth, too much to expect that they should prove their courage, in a small troop and armed merely with shield and spear, against guns that hit at a distance, and send invisible and inevitable death.

Their little floating vessels, which we see so frequently standing against the trees on the shore, serving as fishing-boats, and also for crossing to the opposite side, consist in the Nile merely of a bundle of reeds, and have the form of a flat skiff, obtuse at the stern, because the ambaks are joined together at the slender end, and tied in three or four layers one over the other to make the vessel broader behind: there are two holes at the bottom for the feet. They go quickly, and a long flat oar is used to propel them along, as in the other boats: their name is generally with the Arabs, toff, and with the Baràbras, geïhga. The ambak rafts that come from Sennaar, or Rossères to Khartûm, are large, and carry a freight of one hundred ardepps of durra. A little wood approached this morning also on the right to the shore, but having no trees like that of the left shore. I thought previously that the Haba of the Shilluks was scanty, but I have altered my opinion by ocular inspection: the trees must appear thin, even at a short distance, for the stunted thick stems generally stood in the water.

Iron is very rare among the Shilluks as in all Bellet Sudan, notwithstanding the proximity of Kordofân; and it does not seem that the kingdom of Bari has ever provided Ethiopia and Egypt with iron, for

very few instruments and arms made of this metal are found among the antiquities, but, on the contrary, they are of brass and other metals. The use of iron, however, is very ancient, and perhaps a black Tubal Cain may have hammered there long before the tribe accumulated, sufficiently to shew the characteristics of a nation. If an Ethiopian tribe descended from Bari, it possibly kept up a communication with the iron country, from the want of iron in Nubia, though perhaps not by a direct road; or if only a tradition of iron-mines existed, a Rhamses or some other great king, might have followed and traced them out; for the White River was just as accessible as at present, and the vessels of that age would have found more room for sailing,—that is, supposing a *Dædalus* had discovered also sails for Egypt, which we may suppose to be the case from their sea-voyages, and which is also confirmed by the hieroglyphics.

It was ascertained yesterday that the Shilluks pasture their cattle wherever they like. The great inundation of this year has covered their former pasture-ground with slime, or the water has retreated so lately that there is not yet sufficient grass, and the little that has sprung up is already consumed. On account of this want of grass a large number of Shilluks collected, and armed with broad spears, drove their cattle from the mouth of the Sobàt down to this part, and still further to the right shore of the Dinkas. The latter drew back modestly, and pasture now in the interior, renouncing Nile fish for the present.

The Shilluks are feared, and particularly because

they always go in bodies, and even descend to pasture as far as the Sagiën of Mustapha Bey, on the left shore. They behave very peaceably, on the whole, towards us, principally because their Sultan has ordered them to avoid giving any cause for strife, and to leave the *good* Turks in peace. Yet the latter are still in great fear, and Selim Capitan is very unwilling to pass the night on the left shore, so we anchor afterwards in the river. We hear in this country, as in Taka, the greeting of "Habàbä."

I have convinced myself to-day that the villages visible from the Nile, standing, as I thought previously, on the old shore—that is, from the southern part of the Shilluk land down the river till sunset to-day—do not stand higher than the present shore, and that, if they appeared to me to lie higher, it arises from the low region extending behind the shore on both sides of the river, and covered with water. Every village, however, here lies somewhat high, for the ground is elevated by itself, through the decay of the old buildings, and the erection of new ones upon them; or this has been done by the foresight of the inhabitants, as we have also remarked. We remain to-day at the right shore; but not any of the people of the country are to be seen. Thermometer 19°, 30° to 31°, 29°.

3rd April.—We navigated this morning to N., with a few deviations to N.N.W., and halted at noon, by reason of the strong wind. Then we went on to N., and in a bend to W., where a long road stretched before us. Now, in the afternoon, we sail, and shall navigate longer, perhaps, than usual, for the Turks

are hastening to Khartùm and its pleasures. The right shore has some trees here and there. The forest on the left sometimes comes to the shore, and sometimes level alluvial land separates it from us.

Sabatier and I ate with great *goût* to-day, on Thibaut's vessel, two of the three geese we procured yesterday; but Thibaut had nothing new to shew us, except a soffeia (funnel for Merissa), brought from Bari. The people there manage to console themselves for the want of wine with their African mum, made from durra, as they do in other places with mead and beer. We stop after sunset at the Dinka shore, W.N.W., near some trees. Thermometer 18° (cold north-east wind), 29°, and 28°.

4th April.—To-day again the wind is contrary. We go this morning N., with easterly deviations, and in the afternoon N.E., with a few declinations. There are several villages on the left shore; we halt at the right, and the Shilluks retreat. Suliman Kashef confirms to day what I had already heard, viz., that the Shilluks worship a tree. They call it by the general name of Nigàma, which is said to have been introduced by the Great Sheikh, their ancestor, the founder of their union as a tribe, the father of the nation, and their law-giver. Almost every village has such a Nigàma, which is generally a sunt-tree. The place round it is enclosed, and the ground is kept very clear. On any misfortune occurring, the Shilluks throw themselves on their face, under the tree, and call and cry for assistance. It is considered identical with the holy founder of their race. Whether he ordered them to act in counsel after his death

under a tree, and to complain to him; or appointed the tree as a mediator, through which they might converse with him; or, lastly, he may have been buried under such a tree, which thus became an object of veneration; and subordinate Nigàmas spread then with the increase of population. Moreover, the holy circuit of the Nigàma affords an asylum even to the enemy, and also to snakes, toads, and other animals, which are even considered sacred during their abode there, and fed with milk. A similar canonization of rats and mice is represented in the Egyptian temples. The Shilluks hang cows' tails, tufts of hair, &c., on the Nigàmas, as sacrifices.

The germ of gratitude is undeniably planted in the heart of human beings, as in that of animals; and the man of nature who does not enter into more abstruse speculations will not destroy what does good to him, but, on the contrary, foster and cherish it; then comes love, and gradually veneration is paid to it. Idolatry, though often made absurd and laughable enough by superstition and individual notions, may have arisen originally from natural instinct, and is, perhaps, spread throughout all the countries on the Nile, though we have not been able to obtain satisfactory information on this subject from want of a dragoman, even had he only been slightly intelligent, and able to comprehend the questions properly. But this much appears certain, that the object of veneration among these nations does not dwell high in heaven. They had no knowledge of the worship of a Supreme Being. Perhaps their gods stand around them, or walk friendly with them, and eat out of

their cribs. Even beasts, injurious or fatal to man, may receive gratitude and veneration from them in return for some instance of magnanimity. Thermometer 20° , 29° , and 28° .

5th April.—We have stopped since yesterday at a narrow and bare island near the Shilluks, to make astronomical observations, and shall probably remain here to-day. It would delight an astronomer to gaze at the stars in these southern regions, which are never seen in Europe—as for example, the Crozier of the south, Canopus, which, according to our two learned astronomers, was even invisible in Alexandria, and had been first seen by them in Korusko.

Two of my servants have just returned from the Shilluks. I remarked yesterday and to-day that when the women belonging to the villages lying not far from the shore, and close to one another, came to water the herds, with their well made and nearly round pitchers on their heads, the men accompanied them, spear in hand, in consequence of the wicked enemy being in the vicinity. The women did not wear cotton stuff round their hips, but front and back aprons; and some had a third, a leathern one, without hair, thrown over the shoulders, or on the back. Man appropriates to himself the cotton stuff, when luxury goes so far, which is, however, very rare; yet he must be a chief of a village or a Sheikh, to be able to wear it, as is the case with the tribes up the river. My men were not able to purchase a spear or a shield from them. One of the Shilluks, who spoke Arabic well, declared that they wanted the spears themselves, and never sold them to Turks; that they were obliged

to protect the cattle by weapons, and that by means of these beasts they purchased their corn, which does not grow in their country (perhaps in this year owing to the inundation), from which circumstance they were obliged to eat locusts (*geràt*). My men were sent away after this short conversation, during which they were courteously invited to sit down, as I saw at the distance. We proceed an hour before sun-rise from our place, but can only make a short course, in consequence of the wind being contrary, and soon halt again at the shore of the Shilluks; to-morrow we ought to be near Mount Defafaùngh. Thermometer sun-rise, 18° ; noon to three o'clock, 30° to 31° ; sun-set, 29° .

6th April.—Still a contrary wind; the direction N.E., with easterly deviations. We saw a scanty forest on the right, but not any habitation,—mostly alluvial soil, which previously stood under water, even between the trees. When we set foot on such a ground as this, we cannot imagine from whence the reeds, partly burnt away, have sprung. The straw in wads covers the ground here and there, and solitary reed-stalks, the leaves of which seem blasted by the sun and wind; yet there are still tracts with reeds on wet soil: also some groups of reed or long straw huts, like beehives, stand on the left shore. In the afternoon we observe several birds, and the longing after meat drives the vessels of our General and Admiral to the right shore, where copsewood and isolated trees display themselves. Some of our party went off to shoot guinea fowls.

7th April.—Set off at an early hour, with a contrary,

though not a strong, north-east wind, and continued in a north-easterly direction till some hours after sunrise. I hear the joyful cry of "Baghàras!" and perceive immediately from the window a dozen of these mounted herdsmen, who spring forward to the margin of the shore on the left side of the river, greet, and make signs to us. To see horses for the first time after several months gave me a delightful sensation.

It is, perhaps, certain, that cultivation has not ascended the river from hence, for otherwise the useful horse and the camel, which subsequently became indigenous on the Nile, would not have been forgotten, being two of the most necessary animals on earth. Flags and streamers, with the insignia of the Prophet, were hoisted to welcome the bold horsemen as Mahommedan brothers, and to soften their hearts. Then begins a barter for butter, milk, and sheep, but these Anti-Christis are hard to deal with, for they make us pay dearly for everything; yet they also take glass beads as well as gold. It is delightful to view these well-known heads, with their hair twisted back in a tuft. The men in blue shirts carry three or four lances, holding the longer and stronger one in their hand. The pretty girls wear a ferda round their hips, and the swelling bosom is uncovered. A ring decorates their nostrils, as in other regions, but, on the other hand, they wear long hair, falling in tresses on their shoulders—an ornament which we have never beheld in the upper countries. These horsemen, employed as an *avant garde* against the Shilluks, whom they do not fear in the least, are, according to Mariàn, a bold stem of the Baghàras from Kordofal

(the last syllable fluctuates between *fal* and *fan*) who call themselves *Abanies*. Their Sheikh, who is said to be known to me, is called "Wood el Mamùd." I cannot, however, recall his name to my recollection, although he has been with us in Khart m.

The first island-park appeared this morning on the left, its convolvuli in full verdant splendour, and considerably elevated above the water; another one followed, but the variegated flowers were absent, and the lower part of the foliage of the hanging creepers was dry, having been covered longer by the water.

We halted at the left shore to wait for the oxen and sheep which the *Baghàras* had promised to bring, but these brothers in Mohammed, were too well acquainted with our Abu Daoud, Suliman Kashef, who would have dispensed with any payment, and therefore they did not shew themselves. "Naas batalin" (bad people) they were called,—and we navigate in the afternoon further to N.E., and wind to E., where the isolated Mountain Defafaùngh, hanging over the river, sets me on tenterhooks of expectation. Here I shall see pyramids and enormous walls, for the whole rock is said to be formed of burnt bricks (Top achmer). This might have been, therefore, the halting point for the archæology of the Ethiopian world. I must set out on my travels early in the morning and sketch the outlines of its ruins, even if I catch a fever that may continue several days.

8th April.—I was on my feet before daybreak, and woke, as usual, my men from their heavy sleep; I drank a strengthening draught of yemen, and set off with Thibaut, Sabatier, and three servants, one of

whom carried a goat's skin, containing water, to the mysterious mountain which, as the final end of Egyptian or Ethiopian civilization, the first or last power of human art, may afford so much *éclaircissement* to science. Cheerful and brisk—for the sun had not yet risen—I walked with the ostrich and crane, as I called Thibaut and Sabatier, on account of their quick strides, through the Ambak wood, and the long grass of the Savannah-prairie, which was partly burning under our feet. But soon the depressed land of an old river, with standing water therein, lay between us and the foot of Mount Defafaùngh. We perceived by some trees here, on a level with the shore of the Nile, that the water had risen four feet high—what a lake, then !—and, therefore, the Ambak was lying dry, and its root bent and feeble. Arnaud was advancing far behind us, with the military escort given to us for our protection, which we thought we could do without. When we saw armed natives at a little distance from where we stood, my two Frenchmen made a show of courage, but seemed to me to hide their fear under the cloak of joking. It would have been disgraceful to stop and wait for Arnaud, and so one after the other rode upon the shoulders of our strongest servants, to whom a comrade gave his hand, so that he might not stick in the clay soil and morass, and we crossed in this manner a narrow gohr, leaving the little lake and the standing pools at our left.

On we went through the dried low ground until we arrived, after walking a mile or so, at the foot of the mountain where the ground is again elevated, and

contains some trees (also dome-palms). I let the others ascend as if they were running for a wager, and looked right and left for antiquities, picking up stones with which the steep path I had struck into was bestudded, whilst the long grass and low bushes, but still more the projecting rocks, made the ascent difficult and laborious. Some ledges of rocks encircle the gable-end like a crown; no human being could have chiselled here, nor has nature so disposed them in her natural course; I knew the cause from what I had already seen, and from the specimen I had put into my fowling-bag; I was standing upon volcanic ground, and therefore I might expect to see a crater on the top. Reddish ashes and pieces of lava of similar colour filled the space between the rocks, the porosity of which, as well as the particles of shining black little stones, similar to coals and porphyry, convinced me that they have also undergone a powerful volcanic fire, which has dried up all the pores; or the entire mountain might have risen from a subterraneous forge, and poured over itself a thick coating of lava like liquor from a foaming goblet.

If we go upon the supposition, that it is an independent volcano, and not merely an elevated volcanic mass, we may easily recognize in the top an extinct crater, levelled by the fallen walls of rock, such as we see even now on the eastern side, by lava and volcanic mud, wherein ants at present wallow, and by the crumbling fragments of projecting rocks. The summit of this burnt-out volcano forms an oval terrace from N. W. to S. E.; the north-eastern part, however, is shelving, but the reservoir of lava could

not be transplanted here, for some of the breaks of the mountain in that part, are precipitously disrupt, and there are no signs of a lava stream below. The porous rocks on the summit, exhibit a kind of decay, entirely earthy and friable, so that we might believe that they were once covered with boiling mud. The curved rocks, jutting out to the south, are smooth, considerably lower than our summit, and separated from it by a horizontal rocky wall, cleft here and there, which surrounds the crater at the top, and is not higher on the side we are than five to ten feet. The flat part of the upper ring falls away slightly to the west, and no lava stream was to be seen here. If the great lake so often spoken of by me existed at one time, its waters never perhaps dashed over the summit of this Stromboli, which is about four hundred feet high, much as it might increase by the opened sluices of the high land, and thus be in a condition to reach the volcanic mountain itself. An immeasurable circular plain lay now at our feet, in which the Nile extended from W. to N.; at its side, turned towards us, were several standing mountain streams, which join the Nile again at the rainy season, and testify to the changeableness of the course of the river, whose waters formed at one time a large lake at the foot of this mountain, and still do so at high water. No city, therefore, could have stood here, and still less on the little summit of the mountain, where also not a single fragment speaks in favour of the previous existence of Tokuls, although the mountain would have afforded the most splendid building materials to a nation, that had even

only attained a moderate degree of cultivation. I knew already that we should find no ruins here, for the so-called ruins were said to consist of *top*, or bricks; and the fragments of stone have a great similarity to bricks, but only at the first superficial glance. The Turks, however, had taken these stones for bricks, and their fiery imagination pictured immediately pyramids, fortresses, and tombs; which assumption appeared more credible to me, because by embracing it and believing in such an existence, I hoped to be able to trace out, whether the cultivation of the Ethiopians travelled up or down the river. After a few glances, however, at the upper valley of the White Nile, I was soon persuaded, that Defafaùngh only remained as a *ne plus ultra*, an ever-interesting boundary-mark of the cultivated western Ethiopia.

The prospect from the top presented to us some Dinka villages towards S., and a distant chain of mountains to S. E., and another to E. These seem also to lie isolated in the immeasurable plain, from the waters of which they might have stood forth, at one time, like islands. We saw the dung of hyænas and antelopes; and thousands of guinea-fowls enticed us to descend by a steep path on the south-eastern side, where the earlier volcanic phenomena were seen. I scrambled down, whilst the others were shooting, whom my huntsmen had followed by spontaneous impulse; twice I aimed and fired, but my gun flashed in the pan, and I had no more caps. I was therefore obliged to let the birds, driven up from below by Suliman Kashef's 'Turks, fly round my head, or rise under my feet to the number of fifty to one hundred

head, without even being able to kill them by throwing stones, or treading them to death. I thought *habeat sibi*, and wandered over the numberless wild paths, intersecting one another, between thorns and long straw, to the nearest reach of the mountain, which is only slightly elevated towards it in N.E., but of equal height to its base. Up rose a flock of guinea-fowls here, another covey alighted there; they jumped up and run on all sides to hide themselves, or flew to the slopes of the mountain, where they were received by the soldiers standing above, with a discharge from their terrible weapons, which perhaps they had never heard before. Some of the birds smelling powder, who were in the neighbouring copse-wood, called the others in vain to leave the circuit of their hitherto Zion.

In the meantime I had found a solitary fragment of a Burma, red outside and black inside, made in the same manner as those of the Shilluks, and I roved about the mountain from S.E. to N., where several blocks of rock were lying below which had fallen from the mountain, and seemed to be porous basalt, or tophus (the latter most likely, from the regularity and fineness of the pores). These blocks lay scattered far and wide to the east, having sharp corners like those of a red-brown colour, which stand forth as pilasters from the west side of the mountain itself. They appear, however, to have been thrown by violence, rather than rolled to this distance. These blocks, which formerly covered the mountain here as thick crusts of lava, and under which still other crusts may lie, are broken off nearly in a horizontal line

towards the river, and might, therefore, together with their clefts, easily suggest the idea of ancient circular walls or fortifications, to the Arabs and Turks. Perhaps it is from this cause that the Defafaùngh is called also Berba ; for Birbe means a ruin in Arabic. We found there a cave—perhaps there are several—formed of stones piled up one over the other, equal in size to the one at the top on the south-eastern side of the terrace, and inhabited by wild beasts, as we concluded from the hyænas' dung ; on the north-eastern side we remarked several holes and fissures in the rocks, occupied at day by owls, and at night by the guinea-fowls. We saw the former and heard of the latter from some Dinkas, after we had assembled under the shade of large tamarind-trees, on which already there was ripe fruit.

The Dinkas came, laid down their spears at some distance, greeted us with their “hababa,” and sat by our side in a friendly manner. No sooner did they see the dead guinea-fowls than they told us, that they kill them either with stones, or by catching them in the evening in the holes and cavities of the rocks. They were presented with some tobacco at their request, contrary to the usual custom of the Turks, who do not shew such favour to these “Abit.” They thought the “bumb” (report) of guns was “affiàt” (good and fine), but they were afraid of it, like all Negroes, and so much so that it appears laughable to us ; but what ideas may they connect with the simple report, and what species of spirit or devil may they suppose to be raised in the gun !

There cannot be much worship of trees here, for

the neighbouring villages have not any shady trees ; although these splendid tamarinds, with a trunk of five to six feet thick, and dense foliage, to the foot of which moreover the water reaches, as we see by the foot-prints of the Hippopotami, which serve me as an arm-chair, certainly deserve care and gratitude. But there was very little cleanliness at the place where we were sitting (to be silent of the ground being trod smooth by men), and the boughs of the trees did not shew any marks of consecration ; there might have been, perhaps, about one thousand head of black birds sitting on them. We proceeded afterwards along the dry margin of the lake to the two layers of rocks projecting from the ground, wherein we recognise basalt, also porous, but displaying great hardness on breaking off the upper crust. I dare not decide whether this lake be not an extinct crater choked up by the Nile, similar to the Laacher See on the Rhine.

Girard, who has examined my specimens, says indeed truly,—“The mountain is clearly an extinct volcano. It rises probably from a basaltic plateau, for basalt, olivine, and pyroxene appear on it, and red-brown porous lava, with large circular hornblende crystals, as well as dark blue tophus, formed from clear porous scraps of lava and fine ashes, seem to cover its declivity. The tophus, as well as the lava, does not contain any vitreous feldspar, yet pumice stone shews itself under them, but all the products of the volcano prove that it is only converted basalt.”

Everything was therefore collected here to form a

frontier-fortress ; but perhaps it is reserved for another age to see a new *Nigritia* flourishing under the auspices of an enterprising man, who has money, and will undertake men-hunts. Certainly, by that means, the whole country would be deprived of the free and independent negroes ; who, notwithstanding their poverty, will not enlist for gold and silver. They even prefer to remain in the old state, for they love old customs, even if they have seen or been obliged to have better ones. One example will suffice for many. Several Dinka slaves deserted from Fàzogl, who had been made craftsmen, taking with them all the implements of their trade. They appear, however, to have done the latter, not on account of the greater usefulness of such tools, but merely for the sake of the iron, to make spears or bracelets of it : this, at least, our soldiers and Dinkas affirmed. Some of the deserters were also shipwrights, but yet we have never seen a boat, although it would be so useful to them in their marauding expeditions.

The Dinkas accompanied us now to our ships, bringing milk and butter with them ; but we found that they mix cow's urine with the former, which was quite sufficient to disgust us, but not so our servants. The discovery of the desertion of two Dinkas from my vessel delayed the continuation of our journey ; their village, parents, and relations were near this mountain. We had a long parley with their countrymen, who continued faithful for some time, and would not deliver up the two soldiers. At last, when all the threats were of no avail, and we had ordered our soldiers to get their arms ready, some one managed

to entice with a good grace three sheikhs on board Selim Capitan's vessel, whom we had shortly before clothed. We bore off from land, and the poor Dinkas, who were too few to make war against us, saw themselves compelled to give up their brothers, who were immediately then laid in irons; because, according to Turkish custom, these kidnapped men, although they have not taken the oath of allegiance, are subject to French military discipline. But it was contrary to Turkish usage to restore the shiekhs without further extortion, and they would certainly have been carried to Khartùm, if no Franks had been present,—who speak, however, frequently in vain. Even the voluntary slaves were put in chains until they were far distant from their native country. I begged for mercy for the poor prisoners, but in vain: we then made a short course and halted, for good reasons not at the shore of the Dinkas. Thermometer up to 32°.

CHAPTER XII.

LANDING IN THE TERRITORY OF THE BAGHÀRAS.—DESCRIPTION OF THEM. THEIR HOSTILITY TO THE DINKAS, AND MARAUDING EXCURSIONS INTO THE COUNTRY OF THIS TRIBE.—CURIOUS POSITION IN WHICH THE LATTER TRIBE STAND.—MOUNT NJEMATI: EXAMINATION OF IT.—A SHRUB-ACACIA.—APPEARANCE OF ELEPHANTS AND LIONS.—GEOLOGICAL DESCRIPTION OF THE MOUNTAINS.—MONKEYS APPEAR AGAIN.—MOHAMMED ALI UNDER THE FORM OF AN HIPPOPOTAMUS.—ISLAND OF ABU.—THE HASSANIES.—A HIPPOPOTAMUS KILLED BY SULIMAN KASCHEF.—SHORES OF THE NILE COMPARED TO THOSE OF THE MISSISSIPPI.—EL AES.—THE KABBABISH ARABS.—HEDJASI.—THE MOUNTAIN GROUP OF ARAKOLL.—CONDUCT OF SULIMAN KASCHEF TO A SHIEKH AND ARABS.—BEST WAY TO TREAT THE TURKS.—THE DOWNS; THEIR NATURE. INTELLIGENCE OF THE DEATH OF SOLIMAN EFFENDI AND VAISSIERE. APPROACH TO KHARTÙM. ARRIVAL, AND MEETING OF OUR AUTHOR WITH HIS BROTHER. CONCLUSION.

9TH APRIL.—Our direction yesterday was generally N; to-day N. with deviations to the East. We landed early at the left shore, near the Baghàras, who received us on all sides in a friendly manner, and displayed here real hospitality, —with a little craft and self-interest. The mighty bond of language, race and religion, knit immediately reciprocal confidence, which begot eloquence, and lively questions and answers. The herdsmen, part of whom had handsome physiognomies, surveyed our vessels. Whilst their horses remained close by, they brought goats and sheep to us, holding them by a rope, a kurbàk in one hand,

and a long lance and three javelins in the other; and seemed, on the whole, to be a more cultivated and cleanly people, in spite of their dirty *ferdas* and *kittels*, which, being originally of a white or blue colour, were not strongly contrasted one with the other. Their countenance was expressive, with their thick eyebrows and sparkling eyes; the hair being twisted more or less to the back of the head in a cue, allowed the beautifully arched forehead to stand out, but it is often difficult to tell the sex of the young persons.

The women and girls coming to us with milk, butter, and fresh tamarinds, were free in their movements, joked and laughed, and sought to sell their wares as dear as they possibly could, which they exchanged for salt, beads, red pepper, and strings of ostrich-egg shells. All of them were distinguished by a slender shape, a bold carriage, and pleasing form of countenance; some, according to my idea, might be called really beautiful, and they were generally excellently proportioned; they appeared to me like independent, dark Spartan women. A *ferda* was slung over the invisible *rahàt* being used at other times to cover their heads as a protection against the sun; the hair was parted, and arranged in tasteful, little plaits in different directions, or falling down over the shoulders. Red, and other coloured pieces of coral, were placed on each side of the head in an oval form; in which copper, silver, or gold rings were entwined, and even the ear-rings with their pretty elongation of corals and small *conchglia* were fastened to the temples by the shining black

tresses of hair falling over the forehead. This head-dress could not fail of making an agreeable impression upon me, when I thought of the shaven and dishevelled heads of the women in the countries up the river; the unseemly custom of wearing rings in the nostrils was scarcely displeasing here, from this *supposed* ornament being so small. They wore brilliant cut agates or flints of the desert round their neck and across the shoulder and breast,—the younger girls also over the rahàt and on the wrists, which they buy from the Dinkas, as well as corals of different kinds.

On all sides people were advancing slowly towards us, and a regular market was soon formed; but it was only with a great deal of difficulty that I procured a bad javelin. The Arabs said that it would be disgraceful for them to sell their weapons as they were continually at war. These Baghàras are also from Kordofàn, of the race of Selim, and of unmixed blood, for they never marry into any other tribe: whence the difference between them and our radically ugly crew. From time to time they pay tribute, but properly speaking, it is a *don gratuit*. They told us that they would now cross over to the Jengähs (they call the Dinkas Jengühs, although the latter are a different people, and dwell above the Shilluks), since we (their Mohammedan brothers) had visited these regions, but asked accidentally whether so many Shilluks dwelt above, as was reported. They also said that there were a few of the latter nation here, who had retreated at their arrival on the island, and that there was nothing to fear since

the death of the Sheikh of the Shilluks, Abdurachmàn. They thought themselves already in possession of the whole country. The Baghàras left us after sunset, but afterwards partly returned to bring more milk and sheep (for a sheep, one ferda, for a goat about an okka of salt). Thermometer 18°, 29°, 32°.

10th April.—We sail a little with a south-east wind in a north direction with easterly declinations till noon, then it becomes calm and we navigate. Subsequently, with a north-east wind, almost universally to N. and even westerly declinations, until we halt at an island by the shore of the Shilluks. Thermometer 22°, 32°, 30°.

11th April.—It is a faint south-west wind, but we are able to sail; the direction is first N. with easterly deviations, then westerly, and even N.W. by N. until we to go N., where an immeasurable course extends before us. Easterly deviations follow in the afternoon, and the mountain with two peaks seen from the mast before noon, shews itself in N. The river gains a majestic breadth for the short track it is free of islands; the anterior part of the shores is low and bordered with grass. Nile buffaloes which are in incredible numbers here, owing to the grass on the islands, greeted us twice to-day, and with such blows that Rassulla Effendi became quite pale. The tailor-captain is not with us; he has fallen out with Rassulla about a sheep, and was the more desirous for a quarrel, because Suliman Kashef presented to him a loaf of sugar, and he therefore does not want the help of Rassulla to eat Helluh. However, we are

lucky, for the hippopotami have vented their just anger on the strongest point of our vessel.

“Look! there is a dead hippopotamus in the water, and men near it,” was the cry subsequently, but we soon found the difference when we came closer. It was a boat or raft of ambak just pushed into the water and on it some men, whilst others were advancing from the copsewood. Ten Baghàras with lance and shield following out their old system of plunder, had wanted to play the freebooter here among the Dinkas, but were obliged to retreat without having accomplished their object. They found themselves now in the greatest dilemma, for the water was shallow and they were pursued by the Dinkas, of whom we counted from twenty-five to thirty. Suliman Kashef, who sailed a-head of us, ordered a couple of shots to be fired over the heads of the Dinkas, whereupon they retreated a little. The vessel, however, could not take up the Baghàras, on account of the shallow water; they shouted to us to fire once more, but in vain, for the tailor sat at his handywork and would give no orders till Sale discharged one double barrel in the air, which made the Dinkas stand still and gave the Arabs time to row off. In a regular pursuit, the former would undoubtedly have got the worst of it, for they are no swimmers, were without shields, and like the Shilluks, do not cast their spears from their hands, whilst the Baghàras carried shields and javelins.

The Dinkas, however, will not be long in paying a return visit with similar intentions to the Baghàras, and will then bear oval and round shields similar

to those of the Shilluks, which they are accustomed to use in war; the shields of the Baghàras, on the contrary, are round at the bottom and obtuse at the top.

I saw Dinkas frequently on the shore, and nearly all of them were in the same peculiar position which we also remarked above, and on the banks of the entire White River; and which perhaps would denote a kind of affinity, if the language, form of countenance, and customs did not prove otherwise. To rest themselves, they place one foot on the knee whilst standing, and put underneath as a support their hassaie (club of white wood pointed at the bottom) or their spear. A dozen of such one-legged persons standing together is a comical sight enough.

We halted to-day at five o'clock near the left shore to wait for the vessels at an island on which there were monstrous foot-prints of hippopotami. Close above our landing-place lay the tolerably long and wooded island of the deceased Sheikh of the Shilluk islands, Abdurachmàn (Ab del Rahman), Wolled el Desh. It is called by the Arabs Telleb, by the Shilluks, however, Afunje; a name that might bring to our recollection the Funghs,—and here it was where, as I have already mentioned, the Turks in the Expedition of the year 1839, were not ashamed to open the grave of the Sheikh in order to convince themselves that the sworn enemy of themselves and the Baghàras was really dead. It can easily be inferred what a prejudicial impression such an act must have left behind in the minds of the Island-Shilluks. Thermometer 23°, 32°, 30°.

12th April.—We sail N. with easterly deviations; then at noon towards N., close to a mountain group called by the Dinkas and Baghàras Njemati, and it is only with considerable difficulty that we can find a landing-place on the flat shore below the rocks extending in the river, and when we do so we encamp at some distance from it.

Thus many islands have retreated at our side which rejoiced the heart previously with their soft verdure, their flowers, creepers, and trees, or their blades of grass shooting from the majestic stream, whilst the water retreated into the forests of both the shores, and afforded many an interesting picture. Now it is no longer so, the vessel goes far lower: where the wood does not grow on the shore, there is only a melancholy low country, and the cheerful ambak-acacias lie dry on the ground bent and dismembered, throwing out in vain their long shoots with small leaves and solitary little flowers, on the soil where some moisture still remains. The hand of destruction has even fallen on the grass and reeds; sun, animals, and fire have consumed it, leaving merely miserable remains. It is only at times when the sun is rising, that the landscape presents a more enlivening aspect.

13th April.—We shall stop here in the neighbourhood of the mountain till noon. Notwithstanding the heat, I had not any rest till I made yesterday a trip to the mountain, which I always thought must be the real Defafaùngh. I had already seen by the rounded rocks in the river what kind of stone I might expect to find. A layer of gravel extends to the north from

these rocks, and I soon came upon large stones of coarse-grained granite, inclined to a reddish colour, among numerous little marble stones, which I had not hitherto seen. A species of shrub-acacia covered the whole side of the path I had taken under the mountain where the gravel ceased, of which some bushes served me as a shady resting-place. Its leaves had already fallen, its bark was green, and it had short arcuate thorns. The immense number of seed-husks is a proof of the quantity of flowers it bore; they hung altogether in clusters, and I filled my pockets full with them. I saw a quantity of guinea-fowls on a rock running obliquely to the base:—the rocks of the lower mountains are not perhaps more than a quarter of an hour from the water. They became very active when they remarked us, and I ordered, therefore, my dark, half-naked, huntsman to go first, for these are more accustomed to such a sight.

I had roused a herd of gazelles standing at my left, but permitted them to withdraw in peace; for I had just found two little hills consisting of stones of inconsiderable size, evidently thrown together here. Judging from the analogy of the stone hills I had seen in Kassela, and being fully persuaded that no violent rains from the mountains above, or flood from the Nile, could have so placed them, I took them to be ancient tombs, and searched for potsherds and other memorials of buildings that might have stood here, but in vain. Negro villages and cities disappear the moment they are not inhabited, like ignited bundles of straw, and the ashes do not remain on the ground. Yet it is not likely that there were many

inhabited places here, for the unprotected man of nature does not make his residence near the rocky encampments and cavities of wild beasts, and no fragments here indicated the contrary. The native of a civilised country must forget all analogies of his own land, if he wish to comprehend the meaning, custom, and possible conduct of a rude nation.

I ascended with ease the nearest fundament of the granite rock. The rain and distilling sun had produced several round holes, which appeared to have been chiselled by the hand of man, and which may frequently blow up these firm masses of stone, as if a mine were sprung underneath, when they happen to fall on a vein. I found these holes principally in those places where the rocks presented a flat, horizontal superficies, as I had remarked also previously in the granite mountains of the Land of the Troglodytes.

My huntsman—whom, however, I could not see—shot close to me, and a covey of guinea-fowls rose from behind the next block of stone, and induced me to mount in pursuit of them. I took off my shoes, and it was like walking on a red-hot oven, notwithstanding I kept on my stockings. As we ascend to the summit of this mountain-group, a dreadful destruction and piling of rocks one over the other is observed, similar to the scene on the rocks near Phile. Granite rocks, originally lying above the level of the waters, are rounded on the top into the form of pikes, cupolas, and horns. Periodical rains and a hot sun may split, rend, and break them, though only as an exception to the general rule, as I

believe from the analogy of the Alps, the mountains on the Nile, and in the desert and country of Taka; they throw off, therefore, perhaps, their decayed covering, and burst forth new like an egg from the shell; and, although the layers on the side of the wind, rain, and sun, admit of no regularity of form, yet they seldom display any ghastly splits or gaps. I would assume, therefore, that these rocks also stood at one time as crags above or beneath the water, in which opinion I am supported by the rounded gravel visible here and there on the layers of rocks. I cannot certainly determine in what manner the granite rocks, projecting here into the Nile, and extending into the river bed as far as the mountains of Kordofàn, and connected with the distant mountain visible on the other side, in N. and S.E. from the mountains here, may prevent at some future times the waters of the lake from being drawn off.

I was now on the summit, where I found a human skull, and felt myself very tired, whilst evening was coming on. In order to descend by another path, I slid down, disregardless of hurting my *posteriora*, laying my gun on my knees, and tying two guinea-fowls I had shot round my neck; and it was fortunate for me I did so, or else the back of my head would have been stove in. I met one of Suliman Kashef's soldiers on the lower declivity, who pointed out to me wild buffaloes and elephants at a distance, close to whom he had been. We had seen already a very large quantity of elephants' dung. I had lost my huntsman in the rocks: he brought fowls also, but trembled dreadfully, because, just as he was aiming at

the herds, a lion had presented himself at a short distance. The presence of lions was subsequently doubted; but this morning my two other servants took quite a young lion in their hands, to bring him to me; but they thought it more advisable afterwards to let him bask on in the sun. They, as well as several others, remarked also wild buffaloes and boars (Jaluff) in the neighbourhood; and they brought me, as a proof of the former animals being present here, a horn quite fresh, the owner of which, had become the prey of lions; for the marafill (the spotted hyæna), whose calcareous dung is visible in all parts of this region, never attacks buffaloes.

I repaired now to the foot of the next mountain-group, and was soon convinced that it was of the same species of stone; however, to be quite sure, I had peices or specimens of stone brought me from the highest peak, and my servants have confirmed me in my opinion, that there are only two mountains, although Arnaud asserts that he has seen sixteen, without putting on magnifying glasses. Some of these specimens consist of pink feldspar, white albin, grey quartz, and black mica; others of dark red feldspar, but without albin, with white quartz and black mica.

I stumbled upon Suliman Kashef on my way back, who had collected his halberdiers around him, and was enthroned on a rock where he could be seen at a distance. He set out this afternoon to make observations, which he might have done yesterday evening. The heat is very great, and I bathe for the first time since a long while, having left it off

from fear of catching fever. The Frenchmen think that they shew great courage by going into the water; but it is always full of men the whole day long, and no accident has happened from the crocodiles. My men had not shot any of the gazelles that appeared near the rocks, to take a hasty draught; the Baghâras, however, paid us a visit, and brought sheep; they thought that we were come to make war in their favour, yet no Dinkas dwell near here, but more up the river. Thermometer $27\cdot30^{\circ}$; $32\cdot31^{\circ}$.

14th April.—This morning we proceed at last with a favourable south-east wind to north, with easterly deviations; but we soon came to a flat in the Nile, formed by a granite shelf partly visible, which crosses the river. It is called Gisser—the same as wall or dam; analogous to Tschellal—and was once perhaps really a dam and breast-work, of which only the foundations remain. Who can estimate its future form, and its present ramifications! We scrape along it a little, but then all went right, and we passed in the afternoon, N. by W., the very dangerous Machada—el ans, and Machada Abu Seid mentioned in the ascent, where there was an eternal grating of the vessels, as if over a gravelly bank: first we, then the others stuck fast, and the sailors had very troublesome work. We halted at the left shore, where an incredible number of monkeys were sitting on the trees. I took my gun, and in searching through the forest, remarked a she-monkey, among numerous others, the young one sitting on the lower branches. As soon as she perceived us, she sprang quickly to her young, took it under her arm, and set herself on the highest bough

of the tree. Who could shoot at the mother for the sake of getting the young? There was another monkey-like animal there which can only be taken at night; I forget the name of it.

An arm of the Nile, the ends of which are now closed, appeared to be a favourite pond of the gazelles, though not one of them fell to our lot.

The inundation rises through the entire forest, the earth is cracked far and wide, and not a spike of grass is to be seen under the sun, of which the forest of the Shilluks consists, with few exceptions. But there lay a number of broken off branches and dead trees, that had not attained their proper age, because, when there is too much water, the trees stand too thickly, and their tops get lashed together, and these suns, especially, spreading from top to bottom with short boughs, leave no draught, so that the centre of them is deprived of the necessary air. We remark, however, where the forest is sufficiently thin, a number of trees thrown down and withered, especially where the shores lie lower, and where, therefore, the ground can be scarcely dry at any time of the year. This may proceed perhaps from wind, for though the latter is not so violent as to tear up trees from the root, like our northern storms, yet the tender nourishing fibres are injured or torn off by the continual motion of the trees, which must be followed by a stretching and straining of the roots. The tree stands, pines away, and falls, as we have remarked previously in the country of Taka.

Suliman Kashef related, with an important air, that he shot quite close to a large hippopotamus seve-

ral times yesterday evening, without the beast moving, until, at last, it slowly walked into the river. This Nile buffalo was said to be a Scheïtan, and Selim Capitan believed the very same thing. I threw in a hint that Mohammed Ali might have assumed this form, in order to see what good the expedition was doing—whereupon there was *altum silentium*! Thermometer, 22° 32° to 33° .

15th April.—Between N. and N.W. The nearest shores are low, and even where the forest extends to them, they are but slightly elevated, and the overthrown trees present a melancholy appearance here instead of the cheerful underwood. The old shores of the river are visible right and left through the downs of the forest, and are really high shores, without any deception, for the vessel goes considerably lower during our present return voyage, and no illusion takes place, as is the case with the slight elevation in the extensive plain, which always appears to the eye to be ascending. We navigate on the broad stream as if in the forest, woody islands on the right, the same on the left, but sunt, always sunt, with its melancholy foliage,—my heart longs for beeches and oaks and their shady halls! It is only on the shore where winds and water take effect above and below, that we see trees completely uprooted. The high water has no power towards the interior of the shore, but another evil spirit, the Habùb (storm), throws down and scatters boughs and trees.

The north-west wind is against us; we go therefore over N. easterly to N.E. These windings depend principally on how we sail round the islands. The

main direction of the stream is, and remains from the present, N., with slight deviations to E. and W. The shores encompassing the long island-sound, are generally invisible ; an accurate map, therefore, could be only drawn up by a longer stay here.

In the afternoon we halt for a moment at the right shore, and near the large island of Aba, and hear from the Hassaniÿs and people of El Aes that a large hippopotamus had been struck by three harpoons close at hand. We navigate, therefore, to the left, at the island of El Gamùss, which has its name partly from the number of Nile buffaloes taking up their abode in their neighbourhood ; and we see, at its head, the mighty snorting beast half out of water ; but he soon, however, drew back, and swam into the Nile arm, between the island and the left shore. The sàndal was towed near him, and after the sùrtuk had twice upset, yet without confounding the experienced swimmers, and the beast had tried in vain to escape, it occurred to our men, as the hippopotamus was obliged from want of breath to come up constantly to the surface, to fasten the towing-rope to the three harpoons, and thus to drag him ashore like a vessel. Before, however, they got so far, the beast collected his last strength, and shortly before arriving at the shore, sprung up with such force that several of the heroes jumped back. I thought that I should see a national hunt, and the hippopotamus killed with the spear ; but the Turks did not wait for him to gain *terra firma*, but shot at him where he was, half out of water, and certainly, had he landed, he might have trod several men under his feet, and torn them with his respectable tusks.

Nine shots were fired one after the other, Suliman Kashef's was the last, and it hit the animal behind the ear: the blood spouted up, and the monster fell, slain by man's art, not by his courage. We had him dragged by the tow-rope of the sàndal to our landing-place, and I then found that the balls had pierced his neck and back, which might well happen, when we consider that the distance was only fifteen paces and that the beast had a fat hide, with no other shield than the yielding rumples, extending cross-ways over the back. The inside of the holes perforated by the bullets, felt like the body of a fat hog. The monster might be even compared in his clumsy form to a small elephant, and both correspond just as little as the crocodile, to our usual ideas of beauty in animals, which are generally reduced to the standard of the noble horse. The skin of the hippopotamus displays a dirty pink hue, from the back to the belly, and the dark green of the upper part of the body runs into this other colour. The skin, in drying, changes to a dark grey.

The soil of the island, excellent in other respects, is torn up by the inundation, ascending several feet over it; but many trees are lying withered and parched up on the ground. I took a specimen of the seeds of a dwarf acacia, with barbs: I observed also guinea-fowls and monkeys: the last are said to swim.

Sabatier, who compares the shores of the Nile here to those of the Mississippi, only that on the latter the trees are higher, is going to accompany me, in Thibaut's bark to the Aes, whilst M. Arnaud decides upon preparing to-morrow the skin of the hippo-

potamus, which he has bought for two hundred and fifty piasters.

16th April.—Thibaut has started without us — asleep, as he afterwards said. We remain under Arnaud's jurisdiction till the afternoon, then go libahn against the north wind, and halt late in the evening, at the right shore. Thermometer 24°, 34°, to 35°.

17th April.—The wind is against us in our course ; forest, islands, downs, mostly with a gentle ascent and shallows, alternate with my impatience, until at last we reach El Aes in the afternoon.

El Aes, lying on a sandy down, which ascends and descends with intermission, is said to be a new place, and is called after a former sheikh of this name. The present sheikh is denominated Achmet, and the people appear to be a mixed breed. They do not wish to have much acquaintance with the Turks, although they are subject to taxation, which a soldier collects there as Kaimakan. Thermometer, noon, 33°.

18th April.—Long before daybreak we proceeded on our voyage, without any oxen having been brought to us. At first we passed by several islands, and then left the island of Gùbescha at our right ; several Sagièn fallen to ruin, and some chains of buckets being visible on the left shore. The village of Hedjasi lies in the neighbourhood, but not a person was to be seen, although we remained there the afternoon ; even onions were not to be got. Suliman Kashef thinks that he is not much beloved here, which I can very readily believe. Thousands of

camels were being led to water on the left shore, by the Kabbabish Arabs who come from the interior, and are said to possess more of these animals than all the other Arabs put together. This occurs every eight or ten days, and the tribe take back with them what water they need. Suliman Kashef wanted to make friends with them, because he saw that they had some cows and goats; but they trotted off as if a storm were coming on, keeping themselves in troops like an army, whilst they are said to have shouted "Abu Daoud!"

The colony of Hedjasi lies in a good situation, and might become a granary for Kordofân. The soil is somewhat light; the ground formerly ascended, which declination might have been gradually lost, when the terraces were in the act of formation; at present it is all fallen away.

19th April.—After we had navigated the whole night, we found ourselves this morning in the country called Tura, from whence various roads lead to Kordofân. The flat shores are sandy, and rise, having a bad and meagre growth of trees. On the right and left are some hills of downs, on which we find reddish pieces of granite, such as I met with near the Sagiën. Whence this poverty of humus, for Nature ought to be more fertilizing, as she washes away sand from the ground first, and then brings the lighter humus just as we see at the Delta? We saw nothing of the mountain group of Arasköll, for the vessels go now too low. Suliman Kashef continues his voyage, whilst Selim Capitan and Arnaud have landed on the left shore, the latter to seek for gold in the

Araskòll. The shores continue in sandy downs, especially on the right side, but an immeasurable level plain extends on the left, of which we have an extensive view, by reason of the shores being scarcely elevated above the water. This character of the country passes also subsequently to the right side. The entirely flat margin of the broader part of the stream, which we sail through with a favourable east wind, following Suliman Kashef, is not pure sand; yet we observe upon it thin tracts of underwood standing back a little, and dwarf mimosas.

This part is, as it were, the mouth of the river, and formed, in ancient times, a shallow lake by the conflux of the White and Blue streams, as the downs on the right prove, which are in connection with those at Khartùm, and formed the very same embankment; for the more violent pressure of the Blue river clearly opposes the broad stream of the White one, as we see plainly near the island of Tuti, and perhaps only subsequently broke through the angle of land at the right side of this island; if it made previously, as the Arabs believe, a bend from the city of Soba to the west into the White river, and thus surrounded, with the latter, the desert rocks of Omdurman lying at the side. An investigation, however, would be necessary to ascertain this point. The Downs continue again afterwards at the right shore, alternating even with downs of earth.

If a shallow lake of such dimensions existed here at one time, the north wind drove its waves and billows to this side, and piled up these irregular heights, which are not arranged in a row like a chain, but

sometimes advance, sometimes retreat. The lake withdrew, and the river levelled, took and gave, so that in many places long tracts of continuous sandy shores existed, having, however, a fertile substratum, because otherwise there could not be the vegetation that there is. This subjacent soil is also frequently visible as humus or morass, and under it an adhesive blue clay is found, as I ascertain plainly by the sailors' poles, which are continually being pushed into the deep. Thermometer 22° 29° to 30° 28°.

20th April.—We halted yesterday at sunset, near the mandjeras of Khurdshid Basha on the right shore. These docks (there is a similar one on the blue river at Kamlin) are still used, and two new ships have just been built, whilst ten barks are in dock for repairs. The workmen live in the village immediately behind the high shore of the downs, and I saw, in my excursion there, several fowls walking cheerfully with a number of turtle-doves in the shade of the sunt trees, although the people would not sell me a fowl. There is also a corn magazine here, with overseers and soldiers.

The neighbouring sheikh and Arabs came to kiss Suliman Kashef's hand: he never once looked at them, but went on speaking with the other Turks. Such conduct, with many other things of the same kind, is practised deliberately; although it may seem to the inexperienced only to arise from forgetfulness. In short, the Turks do everything to make themselves disliked. It is most advisable for a person who is not dependent on them, to treat them with a certain kind of indifference, to seat himself immedi-

ately close to them, stretch his legs here and there in all possible ways, and ask for a pipe, without waiting for this favour from the swaggering fools; otherwise the Jaur or Kaffr will always be neglected and despised by the Musselmen.

I examined this morning the nature of the downs, and found that they are rather deposited earthen walls or dikes, fruitful humus strongly impregnated with shingle or rubbish, (dissolved particles of stone) and sand. A covering of sand overlays these hills of earth, being thick, and accumulated by water and wind towards that part of the river-side which is more broken and washed away. The hills lose themselves towards the land side, gently descending in a wide plain (galla) covered with scanty mimosas, which still remain tolerably elevated above the river and the left shore. We observe here far beyond the lower trees, a second dam of downs, which may surpass the former one in height, and perhaps is the old border of the right side of the Nile.

Now, when I see from these heights of downs, which are sufficiently elevated to enable me to look over a low surface of earth, the left shore lying level with the water-line itself, I am no longer surprised at not having found any limits for the border of the Nile, on our ascent. But it is exactly on this account that I take it to be impossible, with the present state of the Nile, that those morass hills (for the constituent parts are and remain nothing else but morass, mixed and rolled on by other powers than the present), could be formed, even at the highest water-mark, under present circumstances. Yet the latter have been always

the same since the land became dry, and the left shore was still lower than it is at present. But *now* the river has full play, and it cannot therefore rise high, as the appearance of the hills of earth teach us themselves. If there lay here, however, a shallow lake, through which the current of the Nile flowed, then morass-hills might have been formed to the height of the highest water-mark. And this is what I believe. The Downs still continue for a good tract, and are lost imperceptibly, again to emerge under the very same appearance.

Arnaud wants to have the hippopotamus-skin dressed again; it is extended on the sand, but it diffuses a very bad smell, and he retains therefore only its head. We must remain here till noon for the sake of this important business, and because Arnaud *will* make observations. Then a somewhat favourable but faint wind gets up: we navigate henceforth almost N. and N.W. In the afternoon the piles of earth, thrown up by the waters of the lake, are visible on the right side of the Nile, similar to those I have seen in the lake-caldron of Taka.

At dusk reefs are seen in the river: they appear to me to be limestones, and extend from the granite bank of Syene across the river from E. to W. At one time they might have carried on their backs beautiful islands, as the granite reefs also previously seen, which took the road of the lake, and perhaps settled themselves again at the Delta. We see that the White River finds opposition also here, and has found still more, from which its slow current is confined by itself. We navigate till late at night as far as Mount

Mussa or Brane, from which I procure specimens of stones of the chert species, and remain there. Thermometer, 22°, 30° to 33°, 21°.

21st April.—We come again before noon to a reef of rocks running through the river, although the passage remains wide and broad enough:—then to sluices. The favourable wind does not last long to day; but the men row diligently, for every one is hoping to see something dear to him again, like myself, who am impatient and ardently longing for my beloved brother. Our course goes mostly between N. and N.N.E., and in the evening, we land near the trees of Moha Bey, where the last downs appear, whilst the shore extending flat on the left, supports its old character. I am thinking of making an excursion afterwards from Khartûm, because by the direction of the downs I hope to be able to determine something with respect to the shallow lake of the city.

22nd April.—Thibaut wanted to go yesterday evening to Khartûm, to take the first intelligence of our return, but that was not allowed. I am obliged also to remain, because I have fallen among robbers, and have eyes like Argus. The intelligence just arrives that Soliman Effendi is dead. I am sorry for his family, as I was for that of Vaissière, intelligence of whose death was brought to us seven days ago, by an Arabian officer. Soliman Effendi is said, as I hear now, to have poisoned the young lions I possessed: but let him rest in peace! The society of Europeans must and will now take another and better form.

A number of people came from Khartùm to pay their respects to our little Basha, Suliman Kashef, who is lying under the trees on the extended carpet. I am tired, and almost worn out, for I have not slept the whole night, because I am expecting every instant to see my brother, and have been looking, since sunrise, in the direction of the spires of Khartùm. Thermometer 22° at sunrise.

At first we navigate N. by E., then N.N.E. Oh, for the happy meeting! a former servant of ours has just come to his brother, Fadl, and gives me good, but not sufficient, intelligence. We wind north, near Omdurman, shortly before the mouth of the White river, where an arm of the Nile runs round the little island on the left, and rocks in the water on the right lie opposite to those at the right shore. Here, therefore, the White stream had to break the last dam, and its current was doubtless under the small chain of downs of Omdurman. At last we bear up near the rocks from whence the White river, which was unquestionably pressed through them and has but a slight breadth here, takes the direction to north for this short tract. The other vessels are already sailing up the Blue river, and we navigate very slowly behind with our heavy vessel, the wind being contrary.

The thunder of cannon rolled down from the vessels—joy and pleasure. I wished to describe our return, but I did not see my brother. Black thoughts suddenly shook me as if a fit of ague had attacked me. When I saw even the window-shutters of our divan closed, where he might wait for me so comfort-

ably in the shade, I trembled violently, and my knees tottered so that they laid me on the bed. I soon, however, got up, and sat before the cabin ; and just at the moment when our vessel touched the land, some one pointed him out standing on the shore. I jumped ashore from the deck, and fell down : my brother raised me up. Eleven days after this happy meeting he died in my arms, completely broken by the effects of the climate.

APPENDIX.

MUCH has been written, advised, and spoken, concerning the important question of the Geographical position of the sources of the White Nile, since this voyage of mine ; many ridiculous as well as arrogant conjectures, and bold assertions, have been laid before the learned world, without any loss of time, respecting this historical subject. Among the pretenders to the discovery of the sources, Antoine D'Abbadie stands out the boldest of the bold. (*Vide* his letters from Omokullu in Ethiopia, 5th, 6th, and 7th Aug., 1847, in the Athenæum, Nos. MXLI. and MXLII. and those to Jomard and Arago, in Paris, in the "Journal des Débats," 5th Oct., and in the "Comptes rendus Hebdomadaires des séances de l'Académie," 4th Oct. 1847, No. xiv., T. xxv. p. 485—487).

The principal thing of importance for a traveller who starts on expeditions of this kind, is to see with his *own eyes*, and to verify by personal inspection or mental contemplation what he hears from the Natives ; for the *solitary* traveller may have *everything* related to him that he wishes, and, in fact, seeks to obtain. There are no European companions, and still less eye-witnesses of the soil of happy Ethiopia, to tax him with false statements ; and how easy is it to find natives who have no conception of the great importance of their expressions, and are ready, without any qualm of conscience, to assent to the preconceived notions of the traveller, when they think by that means to please him !

M. Antoine D'Abbadie, even previously, had *discovered*

the sources of the White Nile,—as he wrote in a letter, dated 17th October, 1844, from Adoa (Adwa), in Habesh, addressed to us in Kàhira. (Preussische Zeitung, 21st February, 1845, and others.) That glorious fountain-head was said to lie *then* in the land of Gmura, or Gamru, near the mountains of Bochi, or Dochi. The latitude and longitude of it were not given. He does not seem to have planted the *drapeau tricolore* there, any more than my French companions did at the final point of our expedition; because, had they done so, both the Turks and myself would have set up our national standard. For my part I did not let the opportunity slip of denying the claims of D'Abbadie to raise a shout of victory at having solved the question of the sources of the Nile, and to contradict his absurd etymology of the Mountains of the Moon, upon which the whole discovery was said to be based. (Monthly Report of the Geographical Society in Berlin, 7th Annual Vol., p. 20.) He thought that the name of “Gmura,” or “Gamru,” being analogous in sound to that of the Arabic language, had induced the Arabian Geographers to adopt this word, and to form it into the present Kamar (Moon). Mr. Ayrton, to whom I will afterwards advert, takes the opposite side, and is of opinion that the former denomination is a corruption of the Arabic word “Kamar.”

This Nile source of 1844 appears, however, to have been dried up again, or discarded by M. D'Abbadie, for he suddenly transplanted the *true sources* of the White Stream into another country; the forest of Babia, between Inarya (Enarea,) and Jumma Kaka (Djimma Kaka); and, *to be sure*,—between 7° 49' N. Lat., and 34° 48' E. Long., from Paris. (See his reports and letters of 1847).

I must, however, entirely controvert this second discovery, notwithstanding it is declared in the most positive manner. Error, indeed, is natural to man, but truth must assert its

claims ; besides, I do not deny that M. Antoine D'Abbadie would have liked to have made such a discovery, or to become an historical discoverer. Far be it from me, who know what travelling is in Africa,—who suffered the tortures of its deserts and its scorching heat, and struggled several times with fever and death, to consider the Tricolour which he fastened to the trees of the Babia forest as a vane or weathercock. No : I greet it rather with friendly interest as a cheerful sign to science and a way-mark to geographical progress, and as an agreeable surprise to succeeding travellers.

Now D'Abbadie makes *his* source of the Nile bubble up about the *eighth* degree of north latitude ; whereas, I have navigated up the river with this Expedition, which has advanced further than any other, as far as the *fourth* degree north latitude, where, as already mentioned, the sources of the Nile were expressly pointed out to us as lying still farther to the *South*. It appears to me, therefore, a desperate and daring attempt, on the part of our discoverer, to claim for himself “ *primo occupanti*,” that water which he saw, or even waded through, as being *a priori*, the *real and true* source of the White Stream. The pretensions to *priority* of discovery,—claims that were to be kept up on any terms,—may perhaps be what he has fixed his eyes upon, and which he has pursued too eagerly, without any forbearance, as is plainly perceived by his passionate letter to Mr. Ayrton, against Dr. Beke, who inclined to the opinion expressed by me concerning the source. The degree of latitude stated by him, in complete opposition to the direction of all the stream territory we visited, is no stumbling-block to him any more than the diametrically opposite opinion of the natives of Bari.

Antoine D'Abbadie specifies three points which appear to him to decide the only true source of every river ; it is therefore surprising that the *first* of these rules laid down by him,

viz. to determine the course of a river by the *opinion of the people*, is exactly inapplicable to the White Nile ; for *that* is completely in opposition to his favourite idea. He tells us expressly that the aborigines dwelling at the sources of *his* White Nile, make *these very same sources* flow collectively into the Abbay (Blue Nile). It required, therefore, more than courage to throw aside the popular opinion, and to give a contrary direction to the sources, without having convinced himself *personally* of the fact, by a corresponding examination of these supposed tributaries. This statement of the people of Damot ought to be more valued and credited, because, according to him, they derived their origin from Gojam (Godjam), and Bagemidr ; therefore from a northern country on the Abbay.

A nation connected *directly* with another by water-roads, as must be the case between the inhabitants of Kafa, Enarea, and Bari, according to the hypothetical river of D'Abbadie, ought to have *domestic* animals, and customs in common, if only partly so, being under an *exactly similar climatic situation*. Enarea and Kafa have coffee, horses, and asses ; but these are entirely unknown in Bari, as I stated in the year 1844 (*Allgemeine Preussische Zeitung*, 24th July, 1844). Sheep, poultry, and leather are said by D'Abbadie *not* to be in Kafa ; whereas we have found them in Bari. He relates that dollars are very well known in Kafa, and that the merchants are very eager after them ; but in Bari money is not known, as we convinced ourselves by enquiry. From this argument, then, the sources of D'Abbadie and the pretended countries they flow through are not connected with Bari. Besides, the names of these countries were *never* mentioned to us. That the mountain-land, however, lying to the east of Berri, in the neighbourhood of which the water-shed might be found, is a principal emporium for these regions, and that they are connected with the rivers discharging themselves

into the Indian Ocean, follows from the facts previously specified, and even from the indications of the things found there. A slave-market does not seem, however, to exist; and, in order to attest this fact, commercial reports alone could prove whether copper also was brought from the interior of Africa. We may boldly affirm, without any self-persuasion, that the *southerly* direction of the stream can be determined, within a few degrees, from the island of Tshanker, by the plastic formation of the mountainous region, through the cleft valleys of which the true White Nile breaks.

The eye may, as it were, follow what we hear from the natives, who only point towards the south, and assert that they do not know of any water flowing towards E., where they are, however, in commercial relation with the country of Berri, ten days' journey off; but they only speak of *springs* found there, which were translated to us by the Arabic word, "Birr." We were given to understand, also, that this land, so rich in copper, was mountainous; from which I conjectured that there might be brooks there, especially at the rainy season, but that not one of them could stand even a remote comparison with their Tubirih (White Stream at Bari).

So, also, the beautiful fine-grained salt, brought from thence to Bari, is not the rock-salt of the desert, but is extracted from the brackish water and slime, according to the form of the vessels in which it has been boiled. I have seen, however, in the great tract of country between the lower Atbara and the Red Sea, that a land subject to tropical rains—although, as in Africa, without rivers and streams—can provide, even in the dry season, men and animals with water from its earthly womb—that is, from the torrents and water-tanks. The Anthropophagi, also living on the mountain-chain by Logojà, in the neighbourhood of Bari, have not any running

water; but they take it from the ground: namely, from natural cisterns or cavities.

We had all believed that the White Stream must come from the *East*; therefore our enquiries about that side were more careful: but not all our signs towards the East could bring back the Natives from the South, the true source of the Stream. I remember still quite well that I wrote this down immediately, and laid it before the Geographical Society, in Berlin, some years before there was any talk of the various sources described by D'Abbadie. Moreover, it seems to follow from the whole configuration of the line of mountains, that Nature has fixed here a water-shed to the East as well as to the West; for the mountain chains of Logojà and Kùgelu stretch from East and West to South, probably as branches of a mighty mountain-stock under the Equator, from which the streams of the Bach'r-el-Abiad issue.

Although M. d'Arnaud, my companion during the voyage on the White Stream, says that the latter is navigable for a "cinquante de milles" from the island of Tshàncer, and arbitrarily makes the *main arm* of the smaller rivulet of the Nile spring from the east; yet this is either only the remnant of our old affection for the *easterly* descent of the river; or it may be the result of a want of truthfulness. I challenge Thibaut and Sabatier, his own countrymen, to come forward and state whether there was ever any talk about such a main-arm as he describes. According to Làkono, who had been there, and called the land wherein the source lies by the name of Anjan, the water in the *four* brooks, by the conflux of which the White Nile is formed, reached *only up to the ankles*. This land, however, lay to the south, as my travelling companions must remember, and which Arnaud also allows, as I will afterwards prove.

Now if we would follow for at least 5° towards the north such a Nile brook, from this county of Anjan to the Forest of

Bahia, in order to be extraordinarily complaisant to M. d'Abbadie, who might rely upon Arnaud, we should not find, even with a microscope, the silver threads of his sources.

Now if I wished to discard the opinion of the people of Bari, as being contrary to my conviction, like d'Abbadie has done with respect to the views of the natives, because they were opposite to his theory, I would not say anything of the rashness of the "Knight of the Source," nor envy him the fame which is due to him as an indefatigable traveller, and the *croix d'honneur* awarded to him for this presumed discovery ; that is, supposing that the stream we had before us on the island of Tshanker wound to the *east* from the south under the rocks of Lugi and Kalleri (evidently harbingers of a high mountainous region), and then flowed humbly under the mountain-chain of Logoja, to seek its origin from the fourth to about the eighth degree of north latitude. The river, however, does not accommodate itself to this course, but steps forth boldly from its rocky gates, as a mountain-stream. The ascending ground, and the rocks scattered in the river above the island, shew that the fall must increase considerably in the mountainous region—as even the rocky wall of Kàlleri forms a vast waterfall at the rainy season—which might make us conclude that there is a lake lying high, in which an extensive mountain plateau pours its waters, or perhaps even serves as a periodical channel far above the Nile. The greater gradation of the river-bed, necessarily following its entrance into the rocky territory, must at last make the Forest of Babia an enormous height, in a progressive ratio ; and the latter, though at a distance of four to five degrees, must be connected with mountain-ridges, to lead the stream into a high longitudinal valley lying to the south, as if into an aqueduct, so that it may not pour into the vast basin to the west, to which the Sobàt also is hastening. Without entering point by point into Antoine d'Abbadie's

accounts, which are not always clear, and the hypothesis of his defenders, I must assume that he abode not only in Inarya, the field of his study on the sources, but also in Kafa and Bonga, for he expressly says so. I can readily believe also, that the complication of rivers in the Forest of Babia cost him considerable pains to find out the *true* source of the White Nile, against the *general and prevailing opinion there*; likewise, that he tried to discover, by means of verbal expressions, the relative quantity of water of the five tributaries, because otherwise he must have resided there three or four years, &c.

Now if it be true that the people of Damot have emigrated from Gojam, the Abbay must be well known to them, because Gros-Damot lies between water, which partly encompasses Gojam, the Gojab, and the Didesa. I do not altogether understand how he can reject the testimony of the people of Damot, on the futile ground that they descended from Gojam. If this nation now extends up to the summit of the sources, so must they also know from their primeval acquaintance with the Abbay, whether their waters pour into the Abbay or not. Though the exploration of the mouth of the Niger has also cost much labour and time; and though Dutch simplicity or craft still makes the Rhine flow into the Waal, yet it is more natural for a nation dwelling on a river to know in what direction it flows, than to be able to give the direction of the curves and windings of its tributaries towards the sources. And is it likely, that a people whom he calls aborigines, and who must therefore be acquainted with their home, should not know whether the river runs towards the south or to the north, in a stream territory with which they are well acquainted?

The second decision of D'Abbadie, that the larger mass of water decides a source or a tributary, overthrows entirely his third and most essential one, viz. that one ought to look

at the direction of the river ; because, in truth, he has neither followed the latter as far as the White Nile, nor to the Sobàt, whose sources appear to him a mere bagatelle. It almost seems as if he chivalrously cut asunder the Gordian knot of that entanglement of rivers during his hermitage in Iaka, and has tried to force on us a vague hypothesis as being the real matter of fact.

There is a strange controversy in the relation of his journey of discovery, which ought to be sifted closely. He had *long* passed over the mountain-chain of Nare, when he took up his abode in the Forest of Babia, having arrived, as he expressly declares, from the basin of the Abbay (Blue Nile) into that of the White Nile ; and yet he had, on his right, the sources of the Didesa, a tributary of the *Blue Nile*. According to this statement, he has never issued from the combination of streams of the Blue Nile, or he has come to a point to which rivers flow, as in Paradise, from all four corners of the world. All this is not exactly adapted to make us believe that the river Gojab, or Uma (Omo), which springs from those sources, is identical with the *White Nile*.

Mr. Charles Johnston has conceived the strange belief that he participates in the views of D'Abbadie ; but the good man makes his Gibbee (Durr, Omo) the Gibe and Gojàm of D'Abbadie, *receive* at last the waters of the Abi (Abbay), in the environs of Fàzogl ; consequently he has claims with D'Abbadie to the discovery of the main source of the *Blue Nile*.

Mr. Ayrton also (in the Athenæum, No. MLXI.), steps into the lists for M. D'Abbadie. Notwithstanding his learned attempt to fix etymologically the situation of the source-territory of the Nile by a fortuitous coincidence of words according to a previous plan of D'Abbadie, I cannot assent to his views.

If the inhabitants of the coast of the Red Sea first navi-

gated this Stream, as naturally would be the case, and the Sabæans, from Arabia, conquered Habesh in the time of Solomon, the latter colony might still have remained their principal commercial settlement on the coast, and even have been planted long before their immigrations from Asia. The dialect of the Ethiopians, which we still recognise to belong to the Semitic languages, announces that there was a communication with these maritime countries before the period of history: yet, commerce on the coast of Habesh might perhaps only have remained a coasting-trade; for history hands down to posterity merely the fact, that the Arabs made journeys to China, and that the Nabathæans brought Indian goods and asphalt on their camels to the Egyptian market at the time of Alexander the Great,—the latter article being fished up from the Red Sea. It is improbable that the Sabæans, who were very well known under the successors of Alexander, extended into the Ethiopian highlands their colonies in Habesh, where even now the Arabic language only prevails on parts of the coast, in commercial intercourse. It is very unlikely, also, that they have given the name of “Mountains of the Moon” to a region; because such a change of a local name, which was certainly imposed upon that country beforehand, pre-supposes a regular Sabæan colony on the spot, whose idiom might perhaps be discovered in a different way than by the solitary word “Gamarö,” or “Gimirö;” for we might derive this as well from “Gimri,” or “Gumri,” (turtle-doves), as I have heard also somewhere in the Desert the name of “Gebel Gimri.” It seems to me, therefore, that it is rather too daring to wish to identify this expression,—according to Abbadie, “Gamru,” or “Gmura,” with the Arabic “Kamar.” But if these parts, so remarkable on account of the sources of the Nile, had been known in the ancient times, the Egyptian priests and Herodotus, or most certainly the later Greeks, would have learned something of them.

The argument that the illustrious Claudius Ptolemy derived his *σεληνος ορος* from the Arabs, appears to me completely untenable. There is no record existing beyond the time of this geographer that I know of, which mentions "Gebel Kamar;" if there were, it would be convincing. There can be no doubt that Ptolemy acquired his information from Egyptian elephant-hunters, otherwise he would not have transferred the origin of the sources to the neighbourhood of the Equator. These elephant-hunts were fitted out like military expeditions by the kings of Egypt, and penetrated, according to Pliny, far into the Ethiopian provinces, beyond the Lybian deserts.

I cannot either participate in the views of Mr. Ayrton respecting the points of culmination of the Ethiopian highlands, but I assume that there are three independent mountain-chains in the interior of Africa:—the eastern one in Habesh, the western in Darfûr, and the southern being the Mountains of the Moon, in Anjan, near the equator; which place I have mentioned several times in this discourse. These form also partly the watersheds, as I will explain more clearly. I also will allow myself here a play upon words. According to D'Abbadie, the moon is called in Kafa "Agane" and "Agina," and the name of my moon-country is "Anjan." What more therefore do my African etymologists require? The two countries cannot lie very far asunder, and the analogy of their languages is certainly possible, without even consulting Mezzofanti, but the pronunciation is always difficult to reach. "Angan," however, is not the word for moon in Bari. If we wish to retain the expression of "Mountains of the Moon," we must go back to a primitive word of the language of the place, as Dr. Beke thinks with regard to his "Mono Moezi."

* Poor Cardinal Mezzofanti, "the monster of languages," as Byron called him, died while this translation was being made, 16th March, 1849. (Trans.)

Once more I must return to Freind Arnaud, and his insipid account, for we could not expect anything else from him, as he did not keep any descriptive diary wherein he could note down his dreams about Làkono's body-guard of women, and things of the same kind ; but he has filled up his journal with lion and elephant hunts, and other fabulous circumstances, like a pictorial newspaper. He says (*Vide Bulletin de la Société de Géographie deuxième série, t. xviii. p. 376*) that the Nile is navigable from Bari for thirty hours further, but forms here different arms, the most important of which comes from the east, and flows past the great country of Berri, which is fifteen days' journey towards the east, from the mountain-chain of Bellenia (Pelenjà). I also am of opinion that the river, one arm of which, where we lay near the island of Tshàncer, was three hundred mètres broad, and afforded only a shallow stream of about three feet in depth to the vessels, which had become light by reason of the provisions being consumed, notwithstanding it had two miles' rapidity, may be navigable for a considerable distance further when the high water covers the rocks, provided no cataracts of consequence oppose the course. Therefore he gives thirty hours for the southern direction of the river before he makes an arm go to the east. We could only have settled how far the river was navigated, by proceeding on our course, if that had been possible at the time.

However, there has never been any talk of these thirty hours ; and Arnaud has, of his own will, reduced the distance of thirty days, repeatedly given to us by the king of Bari and his attendants, as the time required for navigating the different arms, in order to pretend that he was *closer* to the sources. But the division of time into *hours* must be known on the White Nile first, before such a flippant substitution can take place. It seemed also incredible to me that Anjan should be a month distant, but thirty days were plainly re-

presented to us. If we reckon only eight hours to be a day's journey, the distance would be *eight* degrees, half of which we should have to deduct naturally for local impediments, to bring the geographical position of Anjan under the equator. That we had not misunderstood the word "month" was proved besides by Lākono clenching his fist three times, to denote thirty days, and also by the expression that after *two months* (therefore at the end of March or beginning of April) the rains commenced. Lastly, the circumstance that several other tribes were said to dwell on the shores towards the south, bespeaks a considerable distance. It is, however, still a question, whether the country of Berri is ten or thirty days' journey off. Lākono, in whose eyes the copper so abundant there has an extraordinary value, might have feared, at the commencement of our acquaintance, that we wanted to spoil his trade with Berri, and to enrich ourselves with its treasures: from this supposition he increased the distance threefold.

But when Arnaud arbitrarily reduces that first statement to fifteen days' journey, it shews a thoughtless disposition; for he was not only present at the conversation with the king, but we have spoken of it among ourselves. He has, therefore, either entirely forgotten it, and his recollection has not been assisted by any notes written down at the time, which is quite necessary in these countries, notwithstanding the illness to which we are constantly liable; or he wanted to give a greater air of probability to his account by fiction, namely, by substituting thirty hours for thirty days.

When I find marked on his map above Bari, "Country of the Pulunchs," it recalls clearly to my recollection how he believed every thing without investigation, and noted down what Thibaut told him. I was sitting one day sketching on the rocks of the island: some natives stood by, who understood very well what I was doing, and I still see them—how

they extended their arms horizontally, and made undulating movements, which was meant to denote a continuation of the mountains lying before us to the south, and then mentioning several names, held up their hands together, and by the thumb indicated to me that there was *one* mountain exceeding all the others in height, whilst they looked contemptuously at the other chain of mountains. At the same time they bawled in my ears, because I did not speak, and still less could answer, so that I was nearly deaf, under which affliction they probably thought I was labouring. I got up and went down to the shore, where I saw Thibaut standing. He stretched his hand towards the south, with an enquiring look, and the people said "Pulunch," whereupon he burst out into an Homeric laugh, and said, "that is something for Arnaud." The latter has made a country out of this observation, and perhaps with justice.

With regard to the time of the winds and rains in Central Africa, I have tried several times, but find myself incapable of explaining these magnificent natural phenomena. It appears certain, that the monsoons of the Indian, the trade-winds of the Atlantic Oceans, and the north winds from the Mediterranean, are subject to different natural laws in the interior of Africa, where it is comparatively cooler than on the sea-shore; for the winds were never constant during our course: they changed continually from side to side, and all the observations and calculations of our sailors, accurate as they are in other places, failed in ascertaining the tide and quarters of the moon. As to the mutual swelling of the two Niles near Khartûm (called by the Turks Khàrdûm), the sources have nothing to do with the first rising of the water, but the succeeding ones give a quantity of water to the countries subject to tropical rains, together with their gohrs and tributaries, among which the Sobât is the most

considerable for the White Stream. This mass of water immediately becomes imperceptibly level, excepting certain disproportions, with the head of Sennaar, conformably to hydrostatic laws.

It would be an idle attempt to endeavour to speak out clearer and more strikingly touching the formation of the soil of Central Africa; for a master like Professor Carl Ritter has already done this in his "Glance at the Source-territory of the Nile." In order to set aside many preconceived opinions, and again to give the true imprint of my own views, I do not hesitate to annex the report of Dr. Girard, whom I have several times mentioned, and which was contained in the above instructive little work, being partly founded upon my geognostical collection; because this learned young man has discovered and ascertained, with acuteness rarely to be found, the quality of the soil in Africa, so far as I am able to judge from my expedition. He says:—"There are three great mountain chains in the eastern part of Central Africa, one extending to the east, the other to the South, and the third to the West. The eastern one surrounds the large Tzana-lake, and contains the sources of the Tacazze and the Blue Nile, and ascends easterly from the latter to a height of more than 10,000 feet. The southern and south westerly, respecting the elevation of which nothing is known, forms the water-shed between the tributaries of the Nile and the territory of the streams flowing westerly, and is that region formerly called the Mountains of the Moon. Lastly, the north-westerly, the centre of which is in the Jebel Marra, from which some tributaries wind towards the south, to the Bah'r-el-Abiad; but the most of these subordinate streams flow towards the west, the centre of Africa. Between the eastern and southern mountain-stock, there is another chain of high mountains, not extensive but lofty, which, forming the westerly part of

Enarea, appears to spread to the kingdom of Bari, and attains in Enarea a height of more than 7000 feet.*

"A marsh-land extends to the south of this mountain, and the Goshcop flows into it: if it be permitted to carry our surmises so far, we should say that not any high mountains are to be expected further to the south, for coffee and cotton are cultivated on the other side of the Goshcop-valley, because we conceive that there is a salt-lake, and, lastly, a land producing gold. The former may be considered to lie on a dry table-land, the latter on a low plain, wherein the auriferous loam and sand may be deposited.

"A similar auriferous foreland seems to extend in the centre of these regions, between the highlands of Enarea and Bari, to the upper course of the Bah'r-el-Abiad, and the mountains of Kordofân, Sennaar, and Fâzogl.† It is a country which is inhabited partly by negroes pursuing agriculture. Another part consists of wide plains, covered with high grasses, wherein many elephants pasture, and which is bounded on the north by a girdle, thirty miles in breadth, of a ground containing gold-sand. These are the plains through which the Sobât (written in French Saubat) flows with its *tributaries* to the Bah'r-el-Abiad.‡ The specimens from the shores of the Sobât are composed partly of a micaceous sand, of a brown black ochrous clay, of chalky sand, and partly of a conglomerate, which is baked together and composed of small fragments of limestone. The sand, when it is pure, consists of several little yellowish

* The above supposition is justified by the plastic proportions given: we must assume, however, that this chain falls away to the country of Bari, but swells up south of Bari, and joins a mountain-stock in the country of Anjan.—*The Author*.

† Gold is, however, unknown in Bari.—*The Author*.

‡ I do not know of any tributaries belonging to the Sobât.—*The Author*.

grains of quartz, a small portion of reddish feldspar, some brown iron-stones, tombac, brown mica, and little grains of a black mineral, the nature of which cannot be accurately ascertained. This composition denotes that the sand derives its origin from a mica slate, and gneiss chain of mountains, not very distant ; for if the sand were far from the mountains from whence it sprang, it would not contain coloured mica. The sand of the shore of the Bah'r-el-Abiad, in the kingdom of Bari, is perfectly similar to this sand, only somewhat coarser in grain, and, moreover, merely attaining to the size of millet. It contains principally quartz, then the same brown mica, only in a larger quantity than in the preceding sand, and, in addition, several more of those black grains, proving that there is hornblende here. This comes probably from syenite and diorite masses, as they are frequently seen in gneiss and mica-slate mountains. They might, however, be of volcanic origin, for they contain, in great abundance, the lava of the Jebel Defa-faungh (written in French Tefafon) on the north boundary of the said plain. The mountain is clearly an extinct volcano. It rises probably from a basaltic plateau, for basalt with olivine and pyroxene are seen in it, and red-brown porous lava, with large rounded hornblende crystals and dark-grey tophus, formed of clear little porous fragments of lava and fine ashes, seem to cover its declivity. The tophus, as well as the lava, does not contain any vitreous feldspar, nor is any pumice-stone observable among them, but all the products of the volcano shew that it is a converted basalt.

“ The volcanic activity appears not to have extended far, and is only discovered on the northern margin of this cauldron, which was probably, at one time, a large sweet-water basin, for the stones of Sennaar in the north, those of Fazògl and Bertat in the east, of the country of Bari in the south, and of

Kordofân and Jebel Tira in the west, are of a different nature.

“The collections in this city are derived partly from M. Werne, who made them in the expedition sent by the Basha of Egypt in the year 1840, and partly are owing to the scientific liberality of M. Russegger; and they afford sufficient information with respect to the general geognostic relations of these scarcely discovered mountains.

“The chain of the Mountains of the Moon consists, according to the several specimens, of gneiss and mica-slate. One of these specimens, was taken from the most southerly point that the expedition reached, and indeed, ‘from the cataracts in the land of Bari;’ that is to say, from the rock which prevented the expedition from penetrating further into the country. It is gneiss, composed of white feldspar, and much black mica, and mica-slate; the friable and exceedingly granulous quartz does not contain feldspar, but small scaly black mica. There is found, moreover, in the valley of Berri, magnet iron-stone, which, however, does not seem to be commonly known; for it has been collected to the amount of several pounds weight, as being merely sand, without any other particles of stone.*

“The magnet-iron displays also, in several places, brittle iron-ore, and reminds me of similar occurrences in the large mica-slate mountain-chain of the Brazils.

“We do not possess, unfortunately, any specimens from the high mountains of Enarea, but the stones of the lands of Bertat, Sennaar, and Fazògl, are well known through

* The magnet iron-stone is not found in the valley of Berri, but principally in the mountains of Bari, especially in Korèk, where it must be, however, general; for the iron-sand I brought with me, which was already cleared from stones, and perhaps from mud, appears in the mountains themselves, in the dry beds of the torrents, and washed out hollows and ravines.—*The Author.*

M. Russegger's excellent collection. There are granite and gneiss mountains in the land of Bertat, and in the southern part of Fazògl; chlorite slate (probably the stone bringing gold here) follows this chain towards the north, together with mica-slate; and lastly, in Sennaar, there is also clay-slate. In the latter, which is very much changed in some places, veins of granite and quartz are at the top, so that here also, as in many other points, the clay-slate appears the more ancient, the granite the more modern stone. Granite is met with likewise on the Bah'r el Abiad, in the Jebel Njemati (Iemati), being partly of pink feldspar, white albin, grey quartz and black mica, and partly composed without albin, and only of dark red feldspar, white quartz, and black mica.

"Similar species of rocks are found in Kordofàn, viz., granite, gneiss, and mica-slate. However, diorite makes its appearance towards the south, consisting of white feldspar, green and black hornblende, and a little volcanic sand. On the island of Tira there is also chlorite slate. But the most remarkable thing is the appearance of clinkstone or phonolite, found in Koldadschi (written also Kodalgi and Koldagi), in Russegger's collection.

"This circumstance is conclusive of a considerable development of basaltic stones in these regions, though it does not denote volcanic phenomena; for phonolite, with us, only appears in those basaltic mountain-groups where there has not been any eruption of volcanoes.

"A sandstone and hornstone formation, probably belonging to the latter tertiary rocks, is situated before the mountain-chain of Kordofàn and Sennaar, to which Mount Mandera, which consists of syenite, is united in the east. It forms the Jebel Mussa, specimens from which have been given both by Russegger and Werne.

"We wind up the geognostical picture of these countries by

saying that we find granite, gneiss, and mica-slate generally spread, with which clay-slate, chlorite-slate, and diorite present themselves, all of the earlier formation, — new stones of basalt, phonolites, and volcanoes, springing from the tertiary epoch, join on immediately to the others. The limestone conglomerates, found in the Sobât, have perhaps their origin in chalk lime-stone, to which they belong apparently, judging from external appearances; and if this should be the case, the geognostical relations of the eastern part of central Africa are closely allied to those of Palestine, Syria, and Asia Minor.”

THE END.

LONDON :

Printed by S. & J. BENTLEY and HENRY FLKY,
Bangor House, Shoe Lane.

